A

Aagaard, G. N., 319
Aaron, T. H., 300
Abood, L. G., 71
Abraham, E. P., 119, 205, 207, 208
Abrahams, I., 288
Abrami, E. J., 294
Abrams, R., 87
Ackerman, H., 202, 205
Adam, O. B., 137
Adams, J. F., 248
Adams, M. H., 22, 26
Adelberg, E. A., 140
Adelman, P., 238
Adolph, E. F., 355
Aikawa, J. K., 275
Aird, R. B., 238
Ajello, L., 172
Ajl, S. J., 76
Albin, M. B., 104
Alexander, D., 346
Alexander, E. R., 111
Alexander, H. E., 105, 115 130, 212, 213, 215
Alexander, R., 230
Alexander, R. C., 238
Allen, A. van, see van Allen, A.
Allen, E. G., 275
Allen, H. N., 110
Allen, J. E., 300
Allen, M. B., 131
Allen, M. C., 251
Allen, M. F., 300
Allen, R. M., 14
Almaden, P. J., 106
Almon, L., 293
Amiard, G., 96
Amoss, H. L., 265
Amspacher, W. H., 319, 337
Anderson, D., 107
Anderson, E. H., 132, 133, 136
Anderson, F. M., 331
Anderson, K., 335
Anderson, L. E., 114
Anderson, M. B., 291
Anderson, R. J., 35, 37, 38, 39
Anderson, S. G., 156, 271, 272, 275
Anderson, T. F., 8, 9, 11, 12, 13, 21, 24, 129
Anderson, W. H., 103
Anderson, W. W., 286
Andrew, B. J., 56
Andrew, V. W., 160, 262, 270
Andrewes, C. H., 153, 161, 225, 226, 227, 232, 234, 236, 267, 269
Anigstein, L., 107, 224, 226
Ansbacher, S., 40
Anwar, A. A., 249
Apekhtin, V. N., 323
Appelbaum, E., 104
Appelman, H. B., 113
Arakawa, S., 265
Aramburu, H. G., 275
Ark, P. A., 253, 254, 250
Arkless, H. A., 321
Arnold, H. L., Jr., 110
Arnold, W. A., 138
Aronson, J. D., 45, 304, 306
Artemeva, Z. S., 253
Aschner, M., 288
Ashburn, L. L., 315, 318
Asheshov, I. N., 239
Asplin, F. D., 230, 270
Asselineau, J., 37, 47
Atkinson, E. E., 248
Atkinson, J. D., 23
Atkinson, R. A., 252
Atwood, K. C., 132, 138
Audureau, A., 138, 140
Auerbach, C., 129, 133, 134 135
Auger, W. J., 202
Austin, E. R., 110
Austrian, R., 131
Axelrod, A. E., 96
Aycock, W. L., 343, 344, 349
Ayres, J. C., 323

B

Baan, P. de, 271
Babbitt, D., 240
Backus, R. C., 5, 6, 12, 21
Bacon, H. E., 214
Bader, N. M., 226
Badger, S. J., 93
Badger, T. L., 323
Baer, R. L , 110, 287
Bahn, J. M., 205
Bailey, C. A., 117
Bailey, J. H., 205, 206, 207
Baird, J. W., 110, 231
Baker, E. E., 296, 304, 305, 306
Baker, E. G. S., 61
Baker, F., 58
Baker, G. E., 110
Baker, H. J., 119
Baker, K. T., 94
Baker, M., 350
Baker, R. D., 286, 289, 291, 293
Baker, R. F., 4, 6, 7, 9, 10
Bakos, K., 272
Bakst, H. J., 293
Baldacci, E., 53, 62
Baldridge, G. D., 108, 231
Bamberg, R. H., 248
Banerjee, D., 116
Bang, F., 272
Bang, F. B., 12
Barber, M., 102, 206, 209
Barber, T. E., 112
Bardelli, P., 321
Barker, F. F., 338
Barker, H. A., 68, 75, 77, 78, 83, 86, 139
Barnes, Z. B., Jr., 112, 320
Barratt, R. W., 130, 131, 136, 138, 140
Bartos, J., 96
Bartz, Q. R., 114
Barwell, C. F., 275
Bass, H. E., 307
Batsche, J., 106
Batson, H. C., 115
Bauer, H., 331
Bauer, J. H., 160
Bawden, F. C., 13
Bawell, M. B., 263
Bazire, G. C., see Cohen-Bazire, G.
Beach, B. A., 334
Beach, J. R., 273
Beadette, F. R., 262
Beadle, G. W., 64, 129, 136, 140
Beal, G. A., 335
Beale, H. P., 257
Beard, D., 6, 12, 13
Beard, J. W., 6, 12, 21, 22, 271
Beard, R. R., 296, 301, 304, 305, 306
Beck, M. D., 229, 304, 306
Becker, E. R., 57, 60
Bedson, S. P., 227
Beigelman, P. M., 107
Belding, D. L., 323
Bell, E. J., 223, 264, 265
Bell, J. A., 112
Bell, J. F., 316, 322
Bellamy, W. D., 205, 207, 208
Benditt, E. P., 345
Benesch, R., 348
Benham, R. W., 285, 287, 293
Beninson, J., 107, 224
Bennett, B. L., 160
Bennett, R., 141
Bennett, S. C. J., 158
Bennett, S. R., 332
Bennison, W. H., 206
Benson, H., 304
Benson, M. E., 300
Berdan, H. B., 172, 174, 196
Bereston, E. S., 110
Berg, R. van der, see van der Berg, R.
Bergoglio, R., 336
Bergold, G., 11, 12
Berkin, T., 315
Berkman, S., 90, 106
Bernal, E., 338
Bernal, J. D., 161
Bernheim, F., 40, 213
Bernreiter, M., 110
Bernstein, J., 232
Berry, G. P., 162
Berson, R. C., 320
Bertani, G., 134
Berthelsen, H., 314
Bessey, O. A., 227, 349, 350, 353
Bettley, F. R., 113

Beumer, J., 24
Beumer-Jochmans, M. P., 24
Beveridge, G. W., 227, 228, 229
Beveridge, W. I. B., 157, 165
Bevilacqua, E. B., 42, 46
Bezer, A. E., 290
Bieler, M. M., 347
Bieling, R., 273
Bigger, J. W., 205
Bilal (Golem), S., 321, 322
Bilibin, A. J., 320
Billen, D., 95
Binder, M., 130
Binder, M. L., 110
Bingel, K. F., 31
Binkley, F., 81
Biochot, J. J., see Josse-Biochot, J.
Biossel, P., 321
Bird, O. D., 40
Birkeland, J. M., 214
Bischoff, H., 106, 119
Bishop, H., 173, 185, 186, 191
Björkman, S. E., 157
Bjørnboe, M., 268
Black, L. M., 13
Blackford, S. D., 319
Blackwell, E., 172, 178, 179, 184, 188
Blair, J. E., 205, 209
Blake, F. G., 223
Blakeslee, A. F., 284
Blanc, L., 321
Blank, H., 12, 108, 231
Blass, H., 321
Blattner, R. J., 262
Bliss, E. A., 115, 118, 225, 337
Bloch, B., 285, 286
Bloch, H., 48
Bloch, K., 139
Bloch, R. G., 212, 214
Blount, S. G., Jr., 323
Blum, H. F., 133
Blum-Emerique, L., 22, 26
Boake, W. C., 269
Boand, A., 205
Bodian, D., 160, 269
Bodoky, G., 268
Boer, H. D., 268
Bogenko, V., 322
Boger, W. P., 103
Bohnhoff, M., 205, 206, 208, 210, 212, 213, 214, 215
Boissevain, C. H., 39
Boivin, A., 40, 129, 130, 131
Bondi, A., 213
Bonner, D., 129, 130, 131, 138, 139, 140, 141, 142
Bonner, J., 131
Bookwalter, H. L., 320
Boquet, A , 42, 48
Bornstein, B. T., 78
Borries, B. v., 1, 5, 7, 13, 21
Borts, I. H., 339
Bost, R. B., 321
Boswell, F. W., 11
Boughton, T. H., 295
Bourdillon, J., 12
Bourke, A. R., 225, 227
Bovarnick, M., 271
Bow, M. R., 321
Bowman, R. L., 238
Boyd, J. S. K., 25
Boyd, W. L., 339
Brackett, S., 350
Bradford, W. L., 107
Bradley, W. H., 116
Brainerd, H. D., 109
Braley, A. E., 113
Brandly, C. A., 273
Bratton, A. C., Jr., 115
Braude, A. I., 112, 334, 337, 338
Braun, A. C., 23
Braun, W., 129, 161, 162, 332
Bregoff, H. M., 76
Bremer, A., 271, 273
Brenner, S. A., 349
Breslow, L., 323
Brewer, C. R., 332
Brewer, J. H., 236
Brian, P. W., 131, 254, 255
Brickhouse, R. L., 108, 225
Briggs, J. N., 116
Briody, B. A., 157
Brissaud, E., 294
Broadfoot, W. C., 249
Brodersen, R., 103
Brodie, B. B., 238
Bronfenbrenner, J., 23
Bronstein, B., 213
Brooksby, J. B., 265, 268, 269, 275
Broquist, H. P., 84
Broschard, R. W., 106
Brown, C. L., 213
Brown, G. B., 90
Brown, G. C., 238
Brown, J. H., 321, 322
Brown, R. A., 45
Brown, T. M., 113
Browning, C. H., 201
Brunetti, O., 262
Bruyn, H. B., Jr., 109
Bryer, M. S., 110, 112, 225, 231, 337, 338
Bryner, S., 209
Bryson, V., 132, 133, 134
Buchanan, J. M., 86
Buchberg, A. S., 113
Buchele, L., 316
Buchman, J., 205, 209
Buck, M., 206
Budd, V., 202, 214, 215
Buddingh, G. J., 314, 335
Buechler, E., 346, 352
Buggs, C. W., 213
Bugie, E., 253
Bull, D. R., 155, 157, 163
Bunnell, I. L., 296, 297, 301, 302, 303
Bunting, H., 12
Burke, F. G., 106, 110, 119, 225
Burkholder, P. R., 114, 136
Burnet, F. M., 129, 151, 153, 155, 156, 160, 161, 163, 165, 229, 234, 239, 262, 269, 271, 272, 275
Burney, T. E., 230
Burns, K. F., 263
Burris, R. H., 85
Burroughs, A. L., 322
Burrows, W., 13
Burton, E. F., 1, 5, 7, 13
Buscalioni, L., 54, 62
Butler, W. J., 324
Butt, E. M., 306
Buu-Hoï, N. P., 29, 47
Byfield, G. V., 323

C

Caldwell, E. R., Jr., 108
Caldwell, F. E., 251
Calhoun, H. G., 136
Callaway, J. L., 286, 289, 291, 293
Camagni, L. J., 206
Cambier, M. J., 204
Camp, G. C., 315
Campbell, A. G., 322
Campbell, C. C., 115, 294 297, 298, 301, 302, 303
Campbell, J. A., 249
Campello, A. del, see del Campello, A.
Canelas, E. Z., see Zabalaga-Canelas, E.
Cannon, P., 343, 345
Cannon, W. B., 345
Cano, C., 338
Cantino, E. C., 172, 173, 175, 176, 177, 179, 184
Caplovitz, C. D., 267
Capros, C. E., 288, 295
Caputto, R., 67, 68, 86
Cardenas, C. C., see Carrillo-Cardenas, C.
Cardini, C. E., 67, 68, 86
Carliner, P. E., 110
Carlson, A. S., 74, 75, 288
Carr, D. T., 214
Carr, M., 205
Carr, P. H., 21
Carrillo-Cardenas, C., 331, 333, 334, 337, 338
Carroll, G., 110
Carroll, H. H., 112
Carpenter, C. M., 202, 204, 205
Carpenter, L. E., 237
Carson, M. J., 117
Carter, C. E., 88, 132
Carter, J. C., 247
Carter, S. J., 113
Casals, J., 152, 238, 261, 262, 263, 273, 274
Case, L. W., 333

Case, R. B., 110
Casey, C. J., 319
Cason, J., 37, 38
Caspari, E., 129
Caspe, V. W., see Wuerthele-Caspe, V.
Caspersson, T., 87
Castaneda, M. R., 112, 332, 333, 334, 335, 337, 338
Castillo, C. G., 288, 295
Catcheside, D. G., 129, 134
Cattaneo, C., 42
Cavalli, L. L., 137
Cavallito, C. J., 205, 206, 207
Cavelti, P. A., 298
Chain, E., 205, 207, 208
Chambers, L. A., 8, 11, 313
Chandler, C. A., 112, 203, 225, 327
Chandler, V. L., 213
Chang, L. H., 38
Chapman, S. S., 314, 315, 317
Chargaff, E., 38, 40, 61, 89,90
Charles, R. L., 202
Chase, M. W., 290
Cheldelin, V. A., 95
Chemerda, C. M., 262
Chen, C. H., 111
Cheney, G., 305, 306, 307
Chernyshev, F. I., 322
Child, H. J., 56
Chimenes, A. M., 130
Choucroun, N., 37, 45, 47
Christensen, J. J., 249
Christiansen, A. M., 132
Christie, A., 45, 299
Christie, R. V., 209
Christman, J. F., 81, 95
Chu, C. K., 293
Chu, C. M., 12
Cifuentes, O. T., 227
Ciocco, A., 344
Clapp, M. P., 315
Clapper, W. E., 204
Clark, D., 306
Clark, F. E., 251, 252
Clark, J. B., 132, 134, 135, 137
Clark, P. F., 163, 239, 343, 344, 345, 348, 353, 355
Clark, W. H., 209
Clarke, L. P., 159
Charles, R. C., 204
Claude, A., 14
Cleland, G. H., 134
Clement, D. H., 26
Cleveland, L. R., 54, 55, 137
Cline, W. A., 117
Coburn, A. F., 203
Cochrane, F. R., 117
Cochrane, V. W., 71
Cocke, T. M., 211
Coggeshall, L. T., 235, 237
Coghill, R. D., 41, 90
Cohen, G. N., 70, 95
Cohen, R., 305
Cohen, R. B., 320
Cohen, S. S., 26, 72, 239, 240
Cohen-Bazire, G., 70, 95
Coker, W. C., 195
Colbert, J. W., Jr., 268
Cole, C. R., 300
Colebrook, L., 289
Coleman, V. R., 119
Collier, W. A., 274
Collingsworth, D. R., 120
Collins, G. R., 208
Collins, H. S., 110, 116, 211, 231
Collins, K., 118
Comes, S., 54, 62
Conant, N. F., 286, 289, 291, 293
Condon, R. J., 116
Conge, G., 28
Connell, J. F., Jr., 119
Controulis, J., 114
Cook, A. T., 116
Cook, D. H., 285
Cook, S. F., 54, 55
Cooke, C., 225
Cooke, J. V., 262, 304
Coombs, F., 286
Cooper, M. L., 202
Cooper, P. D., 8, 94
Coriell, L. L., 12, 313, 314, 315, 316, 317, 318, 320
Cossiett, V. E., 13
Costero, I., 336
Couch, J. N., 171, 172, 174 175, 177, 181, 183, 184,185, 186, 188, 191, 197
Coulson, C. A., 29, 135
Coulston, F., 163
Cox, H. R., 107, 159, 224, 228, 231, 232, 233, 237, 238, 262, 270, 274, 353
Cox, H. T., 172, 174
Cox, L. B., 287
Cox, O. F., 202
Coyle, J. E., 118
Crane, C., 141
Crane, H. R., 6, 12
Crawley, J. F., 262, 263
Creasy, J. C., 313, 314
Creighton, M. M., 37, 38
Cressy, N. L., 213
Criep, L. H., 300
Crocker, A. C., 113
Croissant, O., 11
Crook, E. M., 13
Crooks, H. M., Jr., 114, 116
Cross, F. W., 296, 301
Cross, R. R., Jr., 323
Crouse, H. V., 133
Crowe, M. O., 39
Cruickshank, J. C., 108, 332
Cruise, A. B., 115, 224
Crumb, C., 42, 43, 47
Cryst, E. E., 213
Csaky, T. Z., 21, 22
Culbertson, J. T., 331, 339, 343
Cummings, M. M., 215
Cummins, W. T., 304
Cunha, R., 12, 152
Curnen, E. C., 264, 272
Curtin, M., 116
Curtis, P. J., 254
Cushing, J. E., 141
Cuthbert, R. B., Jr., 110
Cutler, E. C., 287
Cutter, V. M., Jr., 131
Cutting, W. C., 101, 231, 232, 235
Cutts, M., 203

D

Daddi, G., 42, 201
Dahlstrom, A. W., 305
Daines, R. H., 251
Dalldorf, G., 160, 264
Damon, S. R., 318, 331
Damrosch, D. S., 203
D'Andrea, D., 304, 305
Daniels, R. E., 320
Darius, D. J., 229
Darling, D. B., 346
Das, A., 116
David, J. K., Jr., 319
Davis, B. D., 85, 102, 130, 131, 132, 140, 141
Davis, D. J., 275, 294, 295, 304
Davis, E. A., 138
Davis, G. E., 322
Davis, J. A., Jr., 116
Dawes, E. A., 82
Dawson, I. M., 8, 12, 231
Day, B., 236
Day, E., 107
Day, H. G., 352
Dearing, W. H., 112
Dearing, W. P., 45
de Baan, P., see Baan, P. de
De Bary, A., 247
DeBeurmann, L., 294, 295
DeBoer, C. J., 274
DeBurgh, P. M., 229, 271
de Haan, F. G., 83
Delafond, O., 58, 59
De la Haba, G., 135
DeLamater, E. D., 285, 286
Delbrück, M., 13, 21, 30, 129, 135
del Campello, A., 75
DeLuca, F. R., 110, 111
Del Vecchio, G., 337
Demerec, M., 106, 129, 131, 132, 134, 136, 162, 164, 210, 211
Denenholz, E. J., 305, 306, 307
Denisenko, L. K., 316
deRoetth, A., Jr., 108
De Ropp, R. S., 253
Derzavis, J. L., 118
Desbordes, J., 43
Destefanis, E., 338

deSütö-Nagy, G. I., 38
DeToit, C. J., 294, 295
Dettwiler, H. A., 202
Deuel, R. E., Jr., 263
DeVan, W. T. 214
Diachun, S., 250
Diacono, H., 333
DiCarlo, F. J., 90
Dick, G. W. A., 160, 263
Dicken, D. M., 39
Dickey, F. H., 134
Dickinson, L., 26, 158, 274
Dickson, E. C., 304
Diefendorf, H. W., 227
Dienst, R. B., 111, 117
Dietz, C. C., 213
Di Gangi, F. E., 109
Dill, W. A., 115
Dillon, E. S., 21, 22, 271
Dillon M. L., 21, 22
Dimmick, I., 71
Dingle, J. H., 6, 12, 202
Direk, K., 321
Dixon, C. F., 214
Doan, C. A., 237
Dobie, D. L., 132, 134
Dobzhansky, T., 142
Dochez , A. R., 267
Dodge, B. O., 137
Dodge, C. W., 286
Doermann, A. H., 25, 141
Domzalski, C. A., Jr., 110
Donaldson, D., 314
Donaldson, J. M., 293
Donovick, R., 105, 224, 232
Dooneief, A. S., 113
Dorfman, F., 349, 353
Dornbush, A. C., 106, 107, 108, 115
Doudoroff, M., 74, 75, 139
Dougherty, N., 120
Douglas, A. D. M., 116
Douglass, E. D., 291
Dowling, H. F., 108, 205, 209, 225
Downie, A. W., 158
Downs, C. M., 314, 315, 316, 317, 318
Dowzenko, M. R., see Rozwadowska-Dowzenko, M.
Doyle, M. M., 62
Doyle, W. L., 62
Dozois, T. F., 227, 228, 262
Drake, C. H., 290, 291, 292
Drea, W. F., 39
Drechsler, C., 249, 250
Dreisbach, R. H., 231, 232, 235
Drew, L. G. W., 205, 206
Drobinsky, I. R., 318
Drouhet, E., 288
Duane, R. B., 226
Dubin, I. N., 8
Dubos, R. J., 48, 129, 354
Duboscq, O., 63
Ducey, E. F., 318
Ducrest, P., 22
Duffy, C. E., 354
DuFour, E. H., 44
Dufrenoy, J., 94
Dulaney, E. L., 104
Dulbecco, R., 23, 27, 30, 133, 137
Dulluva, A. M., 86
Dumbell, K. R., 274
Dunbar, J. M., 23
Duncan, C. W., 60
Dunlap, A. A., 251
Dunn, R. C., 291
Durrance, J. R., 214

E

Eagle, H., 101
Earle, D. P., Jr., 238
Early, R. L., 227, 228, 229
Eaton, F. M., 249
Eaton, M. D., 108, 160, 227, 228, 229, 230, 231, 235
Ebert, R. H., 212, 214
Eble, T. E., 239
Ecke, D. H., 320
Ecke, R. S., 223, 225, 226
Ecker, E. E., 347
Eddie, B., 228
Eddie, B. V., 304
Edens, C. O., 38
Edgar, E. P., 316
Edlinger, E., 26, 28
Edson, N. L., 40
Edward, D. G., 270
Edwards, L. T., 45
Edwards, M. E., 213
Edwards, M. W., 202
Edwards, O. F., 7, 13
Edwards, R. B., 202
Ehrlich, J., 114, 224, 338
Ehrlich, P., 201
Eichenlaub, F. J., 118
Eigelsbach, H. T., 313, 315, 316, 317
Eimers, G., 202
Eisele, C. W., 331, 335, 337
Ekstrand, T., 39
Elberg, S. S., 331, 332
Eldridge, W. W., 296, 300, 301
Elford, W. J., 12, 239, 269
Elias, C., 29
Elion, G. B., 232
Elkins, M., 110
Ellinger, P., 348
Ellingson, H. V., 228, 229, 320
Ellis, H., 118
Ellis, S. G., 5
Elmendorf, D. F., Jr., 111
Elrod, R. P., 23
Elsden, S. R., 58, 59
Elvehjem, C. A., 345, 348, 353
Ely, S., 321
Emerique, L. B., see Blum-Emerique, L.
Emerson, A. E., 63
Emerson R., 138, 171, 172, 173, 175, 176, 177, 179, 182, 183, 184, 187, 188, 189, 191, 192, 193, 197
Emerson, S., 130, 135, 163, 204
Emmart, E. W., 46, 213
Emmerson, M. A., 57
Emmons, C. W., 247, 297, 289, 290, 291, 296, 300, 301
Ende, M. van den, see van den Ende, M.
Enders, J. F., 270, 272
Englesberg, E., 135
Engley, F. B., Jr., 313, 314
Ephrati, E., 23
Ephrussi, B., 130, 132
Eppes, W., 112, 317, 320
Epstein, S., 285
Erdmann, B., 324
Eriksen, K. R., 102, 205, 206, 207, 210
Eriksen, N., 285
Frikson, D., 290
Espana, C., 152, 274
Espasandin, J., 331
Espiritu, L., 263
Evans, A. C., 239
Evans, A. S., 272
Evans, C. A., 322
Evans, E. E., 287
Evans, L. R., 323
Everett, R. C., 57
Ewan, J. R., 399
Ewing, C. L., 319
Exner, F. M., 23
Ey, L. F., 320
Eyer, H., 11

F

Fabricant, J., 273
Fackler, W. B., Jr., 215
Fagan, R., 331
Fairley, D. M., 114
Fairley, J. L., Jr., 141
Faivre, G., 321
Falco, E. A., 232, 348, 352
Falk, A., 320
Fankuchen, I., 161
Faquet, M., 26
Farghaly, A. H., 135, 138
Farkas, R., 109
Farrant, J. L., 12
Fasan, D. M., 105, 208, 211, 213
Faust, E. C., 107
Fawcett, H. S., 247, 251
Fazekas de St Groth, S., 235, 272
Fedorowa, T. W., see Winogradowa-Fedorowa, T.
Feemster, R. F., 323
Feldman, W. H., 213, 214
Felix, N., 106
Feller, A. E., 6, 12

Fellows, H., 249, 251
Felsenfeld, O., 237
Felton, L. D., 316
Fenner, F., 129, 158, 269
Ferber, K. E., 57, 58, 60
Ferguson, L. C., 334
Fernbach, E., 43
Fernholz, E., 40
Ferris, V., 205, 206
Fethke, N., 37
Fields, W. S., 319
Fildes, P., 204
Fincham, J. R. S., 137, 139
Findlay, G. M., 151, 158, 159, 163, 229, 344
Fineman, B. C., 294
Finland M., 108, 110, 116, 202, 211, 212, 213, 214, 215 216, 228, 231
Finlayson, M. K., 40
Finley, A. C., 117
Finnerty, E. F., Jr., 110, 231
Fischbach, H., 103, 109
Fischel, E. E., 226
Fisher, D. C., 84
Fisher, R. A., 142
Fisk, R. T., 23, 28
Fisken, R. A., 116
Fittipoldi, M. V., 228
Fitzgerald, D. B., 40
Fitzgerald, R. J., 40, 213, 240
Fitzpatrick, F. K., 223, 225, 227
Fleischmann, G., 348, 355
Fleisher, M. S., 235
Fleming, A., 201, 228
Fleming, D., 333, 334
Fleming, D. E., 315
Fletcher, C. M., 205, 207, 208
Flippen, H. F., 209, 228
Florey, H. W., 205, 207, 208
Florio, L., 268
Florman, A. L., 272
Flu, F. C., 287
Fluke, D. H., 23
Flynn, H., 110
Flynn, R. M., 95
Foerster, R. H., 294
Foley, G. E., 113
Foley, J. A., 293
Fong, J., 21, 25
Foot, H. B., 324
Ford, J. M., 132, 134
Forney, J. E., 45, 47
Forro, F., 23, 132
Foshay, L., 313, 314, 315, 316, 318, 319, 320, 325
Foster, C., 346, 349, 353
Foster, J. W., 177, 334
Foster, R. A. C., 22, 240
Foster, W. D., 116
Foter, M. J., 238
Fowler, E. H., 163
Fox, D. L., 181
Fox, J. P., 11, 138, 226, 227
Francis, A. E., 23
Francis, E., 315, 316, 319
Francis, J., 39
Francis, T., Jr., 153, 154, 155, 236, 238, 273
Frank, H., 319
Frankel, J., 120
Freed, R. S., 151
Freksa, H. F., see Friedrich-Freksa, H.
Freund, J., 47, 290
Friedberg, F., 85
Friedewald, W. F., 155, 157, 266, 271, 275, 318
Friedman, M. M., 307
Friedrich-Freksa, H., 11, 13
Fries, N., 130, 131, 134, 135, 136, 137, 138, 140
Frisch, A. W., 202, 239
Fritsch, F. E., 189
Frohman, I. G., 110
Frost, B. M., 205, 206, 212, 213
Frühbrodt, E., 8
Fuentes, C., 293
Fuerst, R., 132, 134
Fuller, F. W., 107
Fulton, F., 225, 267, 274
Fulton, H. R., 250
Fulton, R. W., 256
Furcolow, M. L., 44, 45, 296, 297, 299, 300, 301, 302, 303
Furman, M. L., 118
Fust, B., 334

G

Gaither, N. T., 133
Gale, E. F., 80, 81, 93, 94, 101, 141, 207, 208
Gallia, F., 159
Galloway, I. A., 262, 265,268, 269, 275
Garcia, J. F., 336
Gard, S., 12, 265
Gardner, A. D., 205, 207, 208
Gardner, G. M., 114, 119
Gardner, R. E., 162
Garey, J. C., 59, 60
Garlock, E. A., Jr., 109
Garnjobst, L., 136, 138
Garrard, E. H., 247
Garrard, J., 117
Garrett, S. D., 248, 251, 252
Garson, W., 120
Garvey, F. K., 117
Gaston, S., 117
Gauld, R. L., 115, 160, 224, 268
Gaydosh, M. J., 228
Gear, J., 110
Gebhardt, L. P., 237
Geckler, R. P., 130
Geer, H. A., 237
Geiger, W. B., 91
Gellis, S. S., 268
George, M., 101, 102, 206
Gerhardt, P., 332
Gerstung, R. B., 204
Gessler, A. E., 14
Gest, H., 76, 77, 85
Getz, H. R., 346, 347
Gey, G. O., 12
Gezon, H. M., 105, 205, 206, 207, 208, 211, 212, 213
Ghidini, G. M., 53, 62
Giarman, N. J., 236
Gibbons, E. H., 321
Gibby, I. W., 314, 319, 325
Gibson, C. D., 110, 231
Gifford, M. A., 304, 305
Gifford, R., 264
Gil, S. B., 333
Giles, N. H., 130, 134
Gilford, G. H., 229
Gillespie, J. B., 305, 306
Gilliver, K., 119, 253, 254
Gillmore, J. H., 306
Gilman, H. L., 339
Ginger, L. G., 37, 38
Ginsberg, D., 284
Ginsberg, H. S., 161, 164, 232, 233, 234, 239, 265
Girard, G., 321
Girardi, A. J., 275
Glaser, R. W., 12
Glass, B., 129, 140
Glass, G. B. J., 319, 322
Glazko, A. J., 115
Gleeson-White, M. H., 213
Glenn, J. T., 40, 41, 42, 44
Glover, R. P., 104, 291
Gocke, T. M., 110, 231
Goddard, J. C., 45
Goebel, W. F., 24, 164, 232, 234, 239
Goldberg, D., 103
Goldin, M. I., 256
Goldstein, D. M., 305
Goldstein, O., 103
Golem, S. B., 315, 318, 319, 321, 322, 324; see also Bilal (Golem), S.
Gollan, F., 12
Golub, O. J., 11, 160, 164, 202, 230, 270
Gomori, G., 214
Gonzalez, L. M., 333
Gonzalez Soret, M., 110
Goodgal, S. H., 133
Goodman, J. J., 254
Goodpasture, S. W., 335
Gordon, F. B., 129, 160, 266
Gordon, M., 140
Gordon, R. E., 290
Gordon, S., 106
Gordon, V. H., 106
Gorman, J. E., 112
Gorokhov, V., 322
Gortner, R. A., 284
Gotovskaia, S. N., 324
Gots, J. S., 94
Gotschlich, E., 315
Gottlieb, D., 114, 254, 255
Gougerot, H., 295
Gowdy, R. A., 21, 22

Gowen, J. W., 129, 161, 344
Gowen, L. F., 117
Goytia, R. S., see Silva-Goytia, R.
Graef, I. P., 238
Graessle, O., 120, 205, 206, 212, 213, 214, 236
Graff, S., 14
Graham, D. M., 235
Granick, S., 138
Granovsky, A. A., 55
Grant, C. W., 226
Grassé, P. P., 55, 56, 63
Grassi, B., 53
Gray, C. T., 214
Gray, D. H., 138
Grayson, R., 238
Greaney, F. J., 248
Green, H. H., 44, 46
Green, H. N., 204
Green, R., 116
Green, R. A., 341, 336
Green, R. G., 322
Green, R. H., 11, 12, 234, 235, 236, 239
Greenbaum, S. S., 285
Greenblatt, R. B., 111, 117
Greenwood, M., 325
Greer, W. E. R., 323
Gregoire, C., 1, 5, 7, 13
Greiff, D., 163, 223, 225, 226, 227, 353
Grelet, N., 94
Grey, C. E., 14
Griffiths, E., 103
Griffitts, J. J., 333
Griggs, J. F., 333, 338
Grimm, M. R., 101, 141, 208
Grinnell, E. L., 103
Großwall, A., 43
Gros, F., 93
Grossbard, E., 255
Groupe, V., 11, 232
Gruby, D., 58, 59
Gruenmandel, S., 285
Gruhzit, O. M., 116, 224, 336
Gruskin, B. J., 113
Guarton, G., 293
Guerrero-Ibarra, G., 337, 338
Guggenheim, K., 346, 350, 352
Guintini, J., 11
Guirard, B. M., 140, 142
Gundel, M. E., 351
Gunsalus, I. C., 81, 140
Gupta, B. M., 256
Guthrie, F., 113, 334
Guy, E. G., 224
György, P., 351

H

Haagensen, C. D., 14
Haagen-Smit, A. J., 187
Haan, F. G. de, see de Haan, F. G.
Haas, F., 132, 134, 135, 137
Haas, G. M., 227
Habel, K., 159
Hackett, P. L., 61
Haddox, C. H., 132, 134
Hadley, S. J., 214
Hadorn, E., 134
Haenseler, C. M., 251
Hager, H. F., 104
Hale, A. S., 113
Hale, E. B., 60
Hall, C. E., 6
Hall, E., 57
Hall, E. A., 239
Hall, W. H., 213, 215, 337, 338
Hallauer, C., 271, 273
Halpern, R. M., 231, 232, 235
Hamano, R., 263
Hamburger, M., Jr., 202
Hamilton, D. M., 75, 288
Hamilton, H. L., 225, 227
Hamilton, T. S., 59, 60
Hammersten, E., 87
Hammon, W. M., 151, 152, 238, 265, 268, 274, 344
Hammond, C., 289
Hampil, B., 159
Hamre, D., 11, 205, 206, 208, 227, 228, 229, 230, 232
Hanford, V. L., 229
Hanks, C., 230
Hanson, F. R., 239
Hanson, R. P., 273
Happold, F. C., 82
Harder, R., 172, 182, 187, 189
Hardy, P. H., 272
Hardy, S. M., 113
Harford, C. G., 262
Hargrove, B. D., 251
Harington, A. L., 110
Harrell, G. T., 110, 225, 226
Harrington, E. S., 304, 306
Harris, C. H. S., see Stuart-Harris, C. H.
Harris, D. A., 104, 119
Harris, H. J., 334
Harris, H. W., 213
Harris, J. S., 136
Harris, L. E., 59
Harris, S., 275
Harris, T. M., 169
Harris, W. H., Jr., 204
Harris, W. W., 111
Harrison, J. A., 129, 162, 163
Harrison, R., 289
Harvey, A. M., 209
Harvey, J. C., 211
Harwell, A. B., 320
Haseeb, M. A., 158, 159, 269
Haskins, F. A., 139, 140
Haskins, R. H., 171
Haslam, N. M., 212
Hass, G., 5
Hassan, H. H., 254
Hassebrank, K., 248
Hassid, W. Z., 74, 75, 139, 304
Hast, N., 5
Hastings, E. G., 46
Hatch, W. R., 179, 181, 191
Haunz, E. A., 103
Hauser, C. R., 297
Havens, W. P., Jr., 268
Hawirko, R., 132, 215
Haworth, N., 39, 41
Hayes, L. E., 254
Hazard, J. B., 293
Heady, J. A., 103
Heatherman, M. E., 204
Heatley, N. G., 205, 207, 208
Heckly, R. J., 41, 43
Hedrick, H. M., 162
Hehre, E. J., 73, 74, 75, 288
Heidelberger, M., 43, 46
Heilman, F. R., 104, 107, 108, 111, 112, 227, 291, 317
Heine, J., 287
Heinmets, F., 8, 11, 12
Helmold, R. J., 275
Hemming, H. G., 254, 255
Hendee, E. D., 72
Henderson, D. W., 331
Henderson, L. M., 139
Henderson, W. M., 265, 268, 269, 275
Hendricks, W. J., 226
Hendry, J. L., 203
Henig, E., 350
Henle, G., 155, 266, 275
Henle, W., 155, 266, 275, 346, 349, 353
Henrici, A. T., 285, 287, 289, 290, 291
Henry, A. W., 248, 249, 254
Henry, J., 90
Henry, J. F., 106
Henry, R. J., 90, 106
Henschel, A., 348, 355
Herbert, E. J., 332
Herick, W. van, see van Herick, W.
Herrell, W. E., 104, 108, 111, 112, 227, 291, 338
Herring, R. D., 317
Herrnheiser, H., 352
Hershey, A. D., 23, 30, 137, 162
Hershey, N. J., 323
Heslot, H., 137
Hesselbrock, W. H., 313, 318
Hewell, B., 44, 45
Hewitt, W. L., 229, 231
Hiatt, J. S., 294, 298
Hibbs, J. W., 59
Hift, J., 84
Higbie, E., 262
High, R. H., 300
Hightower, J. A., 112, 317, 320
Hildebrand, A. A., 252
Hill, H. O., 251
Hill, L. M., 110, 111, 228
Hillegas, A. B., 114, 172, 174, 211, 232
Hilleman, M. R., 160, 266, 275, 276

Hillier, J., 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 138
Himmelweit, F., 271
Hines, L. E., 293
Hinshaw, H. C., 213, 214
Hinshelwood, C. N., 136, 210
Hirsch, E. F., 304, 305
Hirsch, F. G., 117
Hirsch, H. E., 137, 138
Hirsh, H. L., 205, 209
Hirshfield, J. W , 213
Hirst, G. K , 153, 154, 155, 156, 157, 234, 266, 271, 273
Hitchens, A. P., 151
Hitchings, G H., 232, 348, 352
Hlavac, C., 104
Hobby, G. L., 117, 120, 214, 215
Hockenhull, D., 139
Hoff, C. L., 288
Hoffa, E., 229
Hoffbauer, F. W., 331, 336
Hoffman, A. M., 306
Hoffman, G., 43
Hofmann, K., 96
Hoggan, I., 255
Holbrook. W. A., Jr., 112, 113, 117, 217, 320, 338
Holdenried, R., 322
Holinger, P. H., 300
Holland, B. R., 83
Hollander, L., 113
Holler, G., 227
Holmes, A. M., 119
Holmes, M. C., 203
Holt, A. S., 138
Holt, L. E., Jr., 348, 355
Holthaus, J. M., 110
Holtman, D. F., 238
Holtman, F., 332
Hook, A. E., 13
Hook, E. W., Jr., 155, 157, 275
Hooton, D. R., 252
Hopkins, J. G., 292
Hopper, M. E., 285, 286, 287, 291
Horgan, E. S., 158, 159, 269
Horowitz. N H., 141
Horsfall, F. L., Jr., 157, 161, 164, 232, 233, 234, 239, 261, 265, 266, 271, 272, 273, 276
Hosoya, S., 104
Hotchkiss, R. D., 92, 207
Hottinguer, H., 130
Hottle, G A , 224, 300, 301, 302, 304
Houck C. L., 205, 206, 208
Houlahan, M. B., 130, 136, 139, 140, 141
Housewright, R. D., 90, 106, 204
Houwink, A. L., 8, 9, 10
Howe, C., 271, 320
Howe, H. A., 160, 269
Howell, A., 296, 301
Howie, J. W., 355
Howitt, B. F., 152, 153, 262, 265
Hoyle, L , 235
Hoyt, H. H., 273
Huang, C., 227, 228, 229, 230
Hubert, E. E., 248, 251
Huddleson, I. F., 332, 333, 337
Hudson, N. P., 344
Huebner, R. J., 224
Hueckel, J. S., 109
Huff, C. G., 163
Huffman, C. F., 60
Hughes, D. F., 81
Hughes, K. M., 12
Hull-Smith, H., 214
Human, M. L., 25
Humphries, F. A., 322
Humphries, J. C., 28
Huneycutt, M. B., 173
Hungate, R. E., 54, 55, 56, 57, 58, 59, 60, 62
Hunt, A. D., Jr., 109
Hunt, G. A., 318
Hunt, J. S., 320
Hunt, M. L., 250
Hunter, G. J. E., 40
Hunter, T. H., 94, 213
Huppert, M., 297
Hurst, E. W , 230
Hurwitz, S., 304
Hutchings, B. L., 106
Hutchings, L. M., 339
Hutchison, D., 120
Hutner, S. H., 130, 138
Hyde, R. R., 162

I

Ibarra, G. G., see Guerrero-Ibarra, G.
Ingersoll, A. W., 38
Ingram, C. H., 113
Irgang, S., 111
Irwin, E. A., 231, 232, 235
Irwin, M. R., 129, 334
Ishii, N., 265
Israel, H. L., 44
Israilsky, W. P., 253
Iterson, W. van, see van Iterson, W.
Ivanova, T. E., 318
Iverson, W. P., 214, 215
Iwasaki, M., 104

J

Jackson, A. V., 229
Jackson, E. B., 114, 115, 224, 227, 228
Jackson, J. W., 320
Jackson, W. W., 320
Jacobson, H. P., 304
Jacoby, A., 106
Jadassohn, W., 285
Jager, B. V., 319
Jakob, A., 8
Jakus, M. A., 6
Jal Vakil, R., 116
Jambor, W. P., 105, 224
Jameson, J. E., 120
Janeway, C. A., 203
Jawetz, E., 119, 271
Jaworski, A. A., 264
Jeffries, H., 263, 274
Jellison, W. L., 321, 324
Jenkins, D. E., 106, 213
Jenkins, D. W., 231, 232, 235
Jennings, H. S., 129
Jennings, M. A., 205, 207, 208
Jensen, H. L., 251
Jensen, H. O. S., see Schmidt-Jensen, H. O.
Jensen, K. A., 134
Jersild, M., 268
Jillson, O. F., 297
Jobling, J. W., 285
Jochmans, M. P. B., see Beumer-Jochmans, M. P.
Johns, G. A., 348, 355
Johnson, B. A., 118
Johnson, B. C., 59, 60
Johnson, C. W., 119
Johnson, F. H., 8, 22, 138
Johnson, H. N., 314, 318, 320, 325
Johnson, J., 255, 256
Johnson, M. B., 318
Johnson, M. J., 93, 94
Johnson, T., 130
Johnson, T. B., 90
Johnson, W. H., 61
Jolit, M., 133
Jones, C. R., 257
Jones, D., 239
Jones, H., 202, 229, 266
Jones, H. L., 119
Jones, J. H., 346, 349, 353
Jones, M. F., 83
Jones, M. J., 83, 139
Jones, P. F., 103
Jones, R. C., 179, 191
Jones, R. R., 298
Jones, W. G , 332
Jongco, A. P., 106
Jordan, C. F., 331, 339
Jordan, R. A., 318
Joslyn, D. A., 224, 338
Josse-Biochot, J., 28
Jouin, J. P., 47
Joynt, M. F., 339
Jude, A., 23
Jungeblut, C. W., 12
Jungherr, E., 272, 320
Juni, E., 79
Jusatz, H. J., 325

K

Kabat, E. A., 274, 290
Kabler, P., 331, 333, 334
Kadull, P. J., 318
Kagan, B. M., 103
Kahn, M. C., 45
Kahn, O. B., 316

Kallman, F. J., 344
Kallos, P., 43
Kamen, M. D., 76, 78, 86
Kamil, S., 322
Kane, J. H., 117
Kaneda, B., 108
Kann, E. E., 137
Kaplan, A. S., 264, 270, 274, 275
Kaplan, B., 287
Kaplan, R. W., 132, 135
Kapros, C. E., 288
Karamchandani, P V., 106
Karling, J. S., 173, 176, 180, 196, 197
Karlson, A. G., 105, 213, 214
Karlsson, J. L., 86, 139
Karpov, S. P., 322
Karran, C. W. C., 106
Kasahara, S., 263
Kasantsera, A., 322
Kass, E. H., 110, 231
Kastlin, G. H., 307
Kasuya, I., 43
Katz, E., 120
Katz, F., 231
Katzin, L. I., 53
Katznelson, H., 251, 252, 253
Kausche, G. A., 1, 11, 13
Kearney, E. B., 9, 345, 348
Keener, P. D., 248, 285
Kehler, H., 5
Keitt, G. W., 254
Keller, H M., 202
Kelner, A., 23, 131, 133
Kelsch, J. J., 14
Kelsey, W. M., 226
Kent, P. W., 38, 39, 41, 43, 47
Kerby, G. P., 21, 22
Kerr, J. A., 154
Kerr, P. S., 291, 297
Kessel, J. F , 160, 269, 304
Kesten, H. D., 285, 292
Keys, A., 343, 348, 355
Khatenever, L. M., 323
Kierland, R. R., 111
Kikuth, W., 226
Kilham, L., 212, 213, 272
Kimball, R. F., 133
Kimmelman, L. J., 212
Kimura, F., 23, 285, 304
King, C. J., 251
King, E. O., 315
King, E. Q., 103
King, H., 225, 226, 227, 232, 234, 236
King, T. E., 95
Kinkel, P., 213
Kirby, H., 53, 62
Kirby, W. M. M., 202
Kirk, G. D., 213
Kirkwood, T., 228
Kirshbaum, A., 109
Kirwan, D. P., 132
Klauber, A., 314, 315
Klein, M., 210, 212, 236
Kligler, I. J., 350, 352
Kligman, A. M., 284, 286, 287, 288
Klimek, J. W., 205, 206, 207, 208
Knaudt, J. A., 224
Knaysi, G., 6, 7, 8, 10, 138
Kneeland, Y., Jr., 110, 231
Knibb, S. A., 297, 301
Kniep, H., 179, 180, 181, 182, 187, 189
Knight, C A , 129, 161
Knight, V., 110, 112, 225, 338
Knop, C. Q., 212
Koch, L. W., 248
Koegler, S. J., 117
Koerner, T. A., 346, 347
Koerth, C. J., 293
Koffler, H., 120
Kohl, W. H., 1, 5, 7, 13
Kohler, A. R., 106
Kohls, G. M., 223, 320, 324
Kohn, H. I., 136
Kohn, J. L., 106
Kölmark, G., 134
Kolpakova, S. A., 322
Komaromy, J., 103
Komatsu, N., 104
Kontorina, A. A., 316
Kooperstein, S. I., 307
Kopferberg, A. B., 119
Koprowski, H., 159, 238, 262, 263, 270
Korkes, S., 75
Kornberg, A., 75, 76
Kornfeld, L., 275
Korth, W., 318
Koser, S. A., 204
Kosmachevsky, V. V., 318
Koval, S. F., 317
Kozloff, L. M., 22
Kraft, L. M., 264, 270, 274, 275
Krag, P., 268
Krahmer, C. S., see Schmitt-Krahmer, C.
Kramer, S. D., 237
Krampitz, L O., 75, 79, 94
Krebs, E. G., 347
Kristensen, M., 138
Krogh, A., 59
Krueger, A. P., 25, 235
Krupka, G., 106
Kubes, V., 159
Kuhlmann, F., 324
Kun, E., 71
Kunkel, L. O., 129, 151, 163
Kurotchkin, T. J., 292, 293
Kursban, N. J., 320
Kursheva, A. N., 316
Kushner, S., 106
Kushnick, T., 214
Kusonoki, F., 285
Küster, E., 170
Kuzell, W. C., 114

L

Labardini, N. R., 331
Labouchère, A., 285
Labzoffsky, N. A., 262
Lackman, D. B., 227, 228, 229
Lacy, H., 107, 211, 212, 214
Laemmert, H. W., Jr., 159
Lahelle, O., 271, 273
Lahey, W. J., 213
Laird, R. L., 112
Lamoureux, E. L., 321
Lampen, J. O., 83, 93, 139
Landerkin, G. B., 250, 251 252
Landron, F.. 291
Landsteiner, K., 290
Landy, M., 39, 204
Langham, W. H., 139
Lankford, C. E., 107, 211, 212, 214
Lanni, F., 271
Lapi, A., 346
Lardy, H A., 75, 139
Larkum, N. W., 39, 204
Larson, C. L., 107, 314 315, 316, 317, 318, 322, 339
Lasser, R., 320
Lastra, T. L., see Villafane-Lastra, T.
Latarjet, R., 23, 29, 132, 134, 162
Laur, W. E., 106
Laurent, A., 268
Laver, A., 287
Lawless, T. K., 319
Lawrence, H. S., 305
Lazarus, A. S., 273
Lazlo, S., 153
Lea, D. E., 23, 29, 129, 135
Leach, J. G., 55
Leben, C., 254
Lebron, A. P., see Pomales Lebron, A.
Lechevalier, H. A., 120
Lederberg, E. M., 130
Lederberg, E. Z., 134
Lederberg, J., 29, 74, 129, 131, 137, 139, 142
Lederer, E., 37, 47
Ledingham, R. J., 249, 251
Ledinko, N., 264, 270, 274, 275
Lee, M. E., 240
Lee, R. V., 306
Leeson. H. J., 343
Lefemine, D. V., 106
Lefler, J. S., 119
Leftwich, W. B , 233
Leibowitz, J., 288
Leidy, G., 105, 115, 130, 212, 213, 215
Leifer, E., 139
Lein, J., 139
Lein, P. S., 139
Leitner, J., 197

Leland, L. S., 118
Leloir, L. F., 67, 68, 86
Leming, H E., 321
Lenert, T., 214, 215
Lennette, E. H., 110, 225, 262, 263, 344
Leon, A P , 224, 338
Lepine, P., 11
Lepper, M. H., 108, 225
Lerner, E. M , 71
Lesuk, A., 37
Levaditi, C., 21
Levens, J. H., 272
Levenson, C. G., 228, 230, 235
Levine, H. B., 332
Levine, J., 103, 109
Levine, M. I., 300
Levine, M. N., 248
Levine, P., 239
Levy, H. B., 89
Levy, M., 117
Lewin, R. A., 138
Lewin, W., 213
Lewis, G. M., 285, 286, 287, 291, 297
Lewis, I., 299
Lewis, P. L., 117
Lewis, R. W., 139
Lewis, S. H., 273
Lewthwaite, R., 114, 117, 224, 228
Ley, H. L., Jr., 114, 116, 117, 224, 228
Leymaster, G R., 265
Leyton, G. B., 347
L'Heritier, P , 130
Lloyd, D., 197
Lloyd, H , 268
Lochhead, A. G., 247, 250, 251, 252
Loede, A., 250
Loefer, J. B., 61
Löffler, H., 334
Logan, M. A., 110, 111, 228
LoGrippo, G. A., 238
Lohrey, R. C., 229
Long, C J., 119
Long, E R . 35, 44, 346, 347
Long, L M., 114
Long, P. H., 112, 225, 337, 338
Longanecker, D. S., 322
Longsworth, I. G., 347
Loos, G M., 133
Loosli, C. G., 228, 229
Lorcher, L. M., 95
Lord, F T., 289
Loring, H. S., 12, 141
Lotz, C , 134
Lourie, E. M., 207
Lowbeer, L., 336
Lowell, F. C., 202
Lichstein, H. C., 81, 95, 348
Lichtman, P., 104
Lide, T. N., 320
Lieb, M , 135
Lieberman, J. E , 213
Light, S F., 56
Lillie, R. D., 315
Lin, C. E., 292
Lind, P., 44
Lind, P. E., 275
Lindegren, C. C., 129, 136, 137, 162
Lindeke, H. I., 112
Lindsay, M., 40
Lindstrom, E. S., 85
Linn, M. B., 254
Linz, R., 215
Lipmann, F., 68, 92, 95
Lipton, M., 290
Lister, L. M., 224
Luginbuhl, R. E., 272
Lumsden, L. L., 45
Lundbäck, H., 275
Luria, G. E., 23, 25, 29, 30, 31, 129, 135, 136, 137, 142, 161, 163, 204, 210
Lurie, H., 294, 295
Lutman, G. E , 343, 349
Lwoff, A., 76, 129, 130, 138, 140
Lyle, E. W., 251
Lyons, H. A., 113

M

Ma, R. A., 118
Maas, W. K., 85, 141
Maass, E. A., 94
McAlpine, D., 248
McAnally, R. A., 58
McAulay, A. L., 132, 134
McCall, K. B., 348
MacCallum, F. O., 159, 229
McCarter, J. R., 42, 46, 48
McCarty, K. S., 14
McCarty, M., 129, 130, 233, 234
Macchiavello, A., 227
McClanahan, R. H., 318
McClelland, L., 235
McClintock, B., 137
McClosky, W. T., 213
McClung, L. S., 129, 163, 343, 352, 353, 355
McCorkle, R. G.,293
McCranie, J., 183, 187, 188
McCrea, J. F., 234, 271, 272 275
McCready, R. M., 304
McCullough, N. B., 331, 332, 333, 335, 337
McDermont, T. W., 338
McDermott, W., 103, 110, 112, 214, 225
MacDonald, G. E., 112
McDonald, J. B., 305
McElroy, W. D., 135, 138, 140
McFarlane, A. S., 12
McGowan, J. C., 254, 255
Machacek, J. E., 248
Macheboeuf, M., 93
McHenry, E. W., 343
Macht, D. I., 109
MacInnes, D. A., 347
McIntosh, J., 209
McKee, C. M., 205, 206, 208
McKee, M. T., 314
McKinstry, D. W., 237
McLaren, A. D., 132
McLean, D. J., 84
MacLean, I. H., 201
McLean, I. W., Jr., 6, 12, 114, 211, 224, 232, 338
McLendon, P. A., 226
McLeod, C., 120
MacLeod, C. M., 131, 201, 204
McLester, J. A., 350
McLimans, W. F., 226
McMahon, M. C., 322
McVay, L. V., Jr., 112, 113, 334
Madajewski, D. S., 214
Madden, S. C., 344, 347
Maddy, K. N., 345
Madinavettia, J., 39
Mager, J., 288
Magill, T. P., 153, 156, 157, 165
Magoffin, R., 107, 333, 334
Mahl, H., 8
Maiden, S. D., 112
Maier, J., 235, 237
Maisky, I. N., 322, 323
Malek, I., 41
Malkiel, S., 161
Maltaner, E., 274
Maltaner, F., 274
Mangold, E., 53, 58, 60, 62
Manil, P., 256
Mankikar, D. S., 116
Manning, M. C., 115
Manninger, R., 153
Manson, L. A., 93
Mantz, H. L., 299
Marcussen, P. V., 297
Mariotte, C. O., 321
Markert, C. L., 131, 137, 142
Markham, F. S., 275
Markham, R., 13
Marmion, D. E., 116
Marshak, A., 133
Martenstein, H., 285
Martin, D. S., 283, 286, 289, 291, 292, 293, 294, 295, 296, 297, 298, 299
Martin, F. L., 132
Martin, R., 321
Martino, E., 116
Marton, L., 12
Marvin, J. F., 12
Mason, H. C., 159
Master, A. M., 104
Mather, K., 143
Mathieson, D. R., 289
Matthews, V. D., 187
Matumoto, M., 263
Mauer, V. G., 230
Maumenee, E., 315
Maurer, F. D., 28
Maxcy, K. F., 223

Maxon, T., 205, 209
May, H. B., 227
Mayer, A., 255
Mayer, M. M., 274
Mayer, R. L., 39, 141
Mayock, R. L., 209
Mazza, S., 336
Meads, M., 110, 117, 212, 225
Medairy, G. C., 348, 355
Mehler, A. H., 75, 76
Meiklejohn, G., 109, 110, 225, 227, 228, 229, 231, 262, 275
Meinke, W. W., 83
Melchers, G., 13
Meleney, F. L., 118
Melnick, J. L., 12, 264, 268, 270, 274, 275
Melville, D. B., 95
Mendez, D., 337
Meneely, J. K., Jr., 104
Menzel, A. E. O., 43, 46
Merchant, W. R., 113
Mercier, P., 321
Merrill, B., 323
Merritt, W. A., 104
Metzger, W. I., 107, 113, 115
Metcoff, J., 346
Meyer, J., 45
Meyer, K. F., 160, 228, 322, 332, 335
Meyerhof, O., 67
Meyers, G. B., 202
Michael, M., Jr., 215
Michelsen, E., 271
Michelson, I. D., 334
Michener, H. D., 119
Michie, A. J., 118
Mickelsen, O., 348, 355
Middlebrook, G., 202
Middleton, J. T., 195
Migiaccio, A. V., 104
Miles, R. C., 332
Milkat, B., 324
Miller, C. P., 205, 206, 208, 210, 212, 213, 214, 215
Miller, D. H., 320
Miller, E. M., 24
Miller, E. S., 271
Miller, H., 135
Miller, H. E., 285
Miller, J., 120
Miller, J. L., 118
Miller, M. H., 266
Miller, O. B., 110
Miller, R. E., 71
Miller, R. P., 314
Miller, S. E., 315, 318
Miller, V. K., 22
Mills, F., 101, 205
Mills, K. C., 267
Mills, R. C., 314
Milzer, A., 238
Minden, M. v., 170, 173, 174
Mingle, C. K., 339
Minuse, E., 273
Minz, B., 95
Mirick, G. S., 204, 211, 233
Mitchell, H. H., 59
Mitchell, H. K., 130, 136, 139, 140, 141
Mitchell, M. B., 130, 136, 141
Mitchell, R. B., 252
Mogaram, M. E., 324
Molinelli, E. A., 333
Monnet, P., 320
Monod, J., 72, 74, 76, 129, 133, 136, 137, 138
Montgomery, R. M., 291
Moore, A. E., 155
Moore, D. H., 14, 38
Moore, F. D., 323
Moore, J. J., 294, 295
Moore, L. G., 116
Moragues, V., 223, 226, 227
Morales-Otero, P., 331, 333
Morey, G. R., 317
Morgan, H. J., 320
Morgan, H. R., 224, 227, 228, 229
Morgan, I. M., 160, 262, 264, 265, 269, 270, 290
Morgan, R. B., 321
Morse, M. L., 88, 132
Morton, G. A., 1, 5, 7, 13
Moscoso, Z., 117
Mosimann, W., 334
Mosley, V. M., 12, 13
Mosonyi, L., 103
Moss, R. E., 323
Mott, E., 285, 292
Moussatche, H., 159
Mowry, H. A., 60
Moyer, A. W., 238
Moyle, J. M., 88
Muckenfuss, R. S., 264
Mudd, S., 6, 7, 8, 9, 10, 11, 138
Mueller, J. H., 71
Mulder, F., 202
Mulvania, M., 255
Mumme, C., 287
Mundkur, B. D., 137
Muntz, J. A., 71, 96
Muraviev, N. V., 318
Murgatroyd, F., 116
Murphy, F. D., 209
Murphy, L. C., 273, 274
Murphy, M. K., 26
Murray, E. G. D., 151
Murray, E. S., 223, 225, 226
Murray, F. J., 238
Murray, J. F., 344
Murray, R., 212, 213
Muschenheim, C., 214
Musselman, A. D., 101
Mutsaars, W., 271, 273
Myburgh, S. J., 57, 58, 59, 60, 62

N

Nabel, K., 172
Nacturk, H. M., 39
Nagle, H., 318
Nagler, F. P. O., 12
Najjar, V. A., 141, 348, 355
Natenshon, A. L., 113
Neal, J. B., 287
Needham, G. M., 102, 112
Neefe, J. R., 268
Negré, L., 48
Negroni, P., 292
Neil, J. C., 22
Neill, J. M., 288, 295
Neitz, W. O., 230
Nelson, C. B., 331
Nelson, E. W., 44
Nelson, F. E., 21
Nelson, J., 104
Nelson, J. B., 158
Nelson, J. W., 46
Nelson, W. E., 45, 317
Nerlinger, C. M., 273
Neter, E., 239
Neuber, E., 289
Newcombe, H. B., 132, 135, 136, 137, 215
Newton, A. C., 138
Nicholes, P. S., 314, 316, 319, 325
Nichols, A. C., 118
Nichols, D. R., 102, 112
Nicolai, H. W., 69
Nicolle, P., 22, 23, 28
Nicolson, D. W., 35
Nielsen, J. K., 109
Nigg, C., 229, 275
Niven, J. S. F., 225, 269
Noirot, C., 55, 56
Nordberg, B. K., 272
Norman, A., 132, 138
Norris, J. C., 293
Norris, R. F., 292, 293
North, E. A., 209
Novak, M., 205
Novelli, G. D., 92, 95
Novick, A., 23, 133
Novikova, N. S., 253
Nungester, W. J., 118, 236
Nyc, J. F., 139, 140
Nyholm, M. H., 137
Nyka, W., 336

O

Oakburg, E. F., 204, 210
Ochoa, S., 75, 76, 92
O'Connor, J. L., 12
O'Donnell, T. V., 40
Oelrichs, L., 273
Ogden, W. B., 255
Oginsky, E. L., 91, 92, 105, 213, 215
Oglesby, G., 334
Ohara, H., 313
Okamoto, Y., 263
O'Kane, D. J., 314
Oldfelt, V., 275
O'Leary, P. A., 111
Olin, G., 322
Oliphant, J. W., 268

Olitsky, P. K., 237, 238, 261, 262, 263, 271, 273, 274, 344, 354, 355
Olive, L. S., 137
Olivo, M. A., 118
Olshaker, B., 110
Olson, B. J., 112, 296, 300, 301
Olsufiev, N. G., 322, 323
O'Neil, C. B., 205, 209
Oosting, M., 320
Opatowski, I., 132, 161
Opie, E. L., 47
Ordonez, H., 334
Osborne, R. R., 213
Oskay, J., 11
Osier, G., 13, 132
Oswald, E. J., 39, 204
Otero, P. M., see Morales-Otero, P.
Ott, W. H., 118, 236, 346, 351
Ottenberg, D., 213
Ottke, R. C., 139
Ovalle, H., 227
Owen, B. J., 315, 316, 317
Owen, C. A., Jr., 105
Owen, C. R., 106, 213, 291
Owens, J. N., Jr., 319

P

Pacheco, G., 331
Pacheco da Veiga, G., 331
Paine, T. F., 211, 213, 214, 215, 216
Pait, C. F., 160, 269
Palacios, H. R., 275
Palacios, S., 224
Paladini, A. C., 67, 68, 86
Palmer, C. E., 45, 299, 300
Pálos, L. Á., 103
P'an, H. S., 25
P'an, S. Y., 117
Pandalai, K. M., 101, 102, 206
Pansy, F., 105, 224
Panzeri, A., 332
Pappenheimer, A. M., 72
Parish, V. L., 227, 228
Park, J. T., 93
Parker, J. W., 113
Parker, R. F., 164, 227, 228
Parker, R. R., 225, 314, 315, 320, 321, 322, 324, 325
Parmalee, C. E., 21
Parr, E., 45, 304, 306
Partridge, C. W. H., 95, 139
Pascher, F., 291
Pasternack, A. B., 320
Pasternak, V. Z., 71
Patel, M. K., 250
Patterson, P. R., 113
Pavelcheck, E., 331
Payne, E. H., 117, 224
Payne, H. G., 118
Payne, H. M., 44
Payne, R. C., 300
Pease, D. C., 4, 7
Peck, R. L., 37, 38, 297
Peck, S. M., 287
Pedersen, K. O., 40, 42
Pelcak, E. J., 107, 108, 115
Penfield, R. A., 313, 314
Pennell, R. B., 332
Penner, M. A., 224, 338
Penttinen, K., 236
Percefull, S. C., 321
Peret, R., 321
Perez, J. B., 236
Perez, J. E., 236
Perkins, D. D., 137, 138
Perry, T. L., 107
Peters, M., 226
Peterson, D. H., 120
Peterson, J. C., 45, 299
Peterson, O. L., 226
Petrik, F. G., 41
Petro, J., 202
Pfankuch, E., 1, 13
Pfuetze, K. H., 104, 214, 291
Philip, A. J., 113
Philip, C. B., 117, 224, 322
Phillipson, A. T., 58, 59
Pi, C. C., 238
Pidacks, C., 106
Piekarski, G., 1, 8
Pierantoni, U., 53, 62
Pierce, C., 354
Pierce, J. G., 95
Pietrowski, J. J., 214
Pijper, A., 9
Pilling, M. A., 213
Pinchot, G. B., 315, 316, 317
Pincoffs, M. C., 224
Pinkerton, H., 160, 163, 164, 223, 225, 226, 227, 343, 350, 353, 355
Pintner, I. J., 80
Pirie, N. W., 13, 129
Piroski, I., 333
Pittman, M., 112
Plager, H., 264
Plass, B. A., 345
Plaut, G. W. E., 75
Plitt, K. F., 315, 316, 317
Plotke, F., 111
Plotz, H., 11, 225
Plough, H. H., 101, 131, 141, 208
Pochon, J., 25
Polayes, S. H., 291
Polevitzky, K., 8, 9
Polgar, N., 38
Pollard, A. L., 332
Pollard, E. C., 23, 132
Pollard, M., 267
Polson, A., 23
Pomales-Lebron, A., 333
Pomper, S., 136
Pond, W. L., 345
Pontecorvo, G., 130, 137, 142
Poole, S. O., 275
Pope, H., 39
Popov, V. M., 322
Porter, C. L., 247
Porter, K. R., 14
Potter, A. L., 74, 139
Pounden, W. D., 59
Prado, L. M., 275
Pratt, P. C., 213
Pratt, R., 94
Prebus, A. F., 1, 5, 7, 13
Preer, J. R., 63
Price, A. E., 202
Price, C. W., 103, 211, 213
Price, H. J., 112, 320
Price, J. P., 133
Price, W., 239
Price, W. C., 13, 163, 256, 13, 353, 355
Prichard, H., 231
Pridham, T. G., 114
Prigal, S. J., 118
Prigot, A., 110, 111, 228
Prince, F. M., 322
Pringsheim, E. G., 53, 61
Prior, J. A., 300
Pritchard, W. R., 273
Proescher, F., 231, 232, 235
Prout, F. S., 38
Provasoli, L., 130, 138
Prytek, D., 285
Puck, T. T., 26
Puffer, R. R., 344
Pulaski, E. J., 119, 319, 337
Pullen, R. L., 319
Puntigam, F., 323
Purriel, P., 331
Putman, E. W., 74, 75
Putnam, E. W., 139
Putnam, F. W., 22
Putnam, P., 160

Q

Quelin, A., 239
Quersin, L., 25
Quilligan, J. J., Jr., 153, 273

R

Rabeau, H., 292
Raby, W. T., 112, 117, 226, 317, 329, 338
Raffel, S., 45, 47
Ragni, M., 118
Rake, G., 11, 12, 105, 202, 205, 206, 208, 215, 224, 227, 228, 229, 230, 232, 266, 344
Rake, H., 11
Ralston, R. J., 117
Ramberg, E. G., 1, 5, 7, 13
Rammelkamp, C. H., 205, 209
Ramon, G., 256
Randall, H. T., 14
Randall, R. V., 109, 110
Randall, W. A., 103, 109, 211, 213
Randles, C. I., 214
Rank, B. K., 209
Ransmeier, J. C., 107, 112,

313, 314, 319, 320
Rantz, L. A., 202, 209
Raper, J. R., 170, 185, 186, 187, 191
Rappaport, B. Z., 287
Rasmussen, A. F., Jr., 235, 263, 345, 348, 353
Ravaglia, F., 321
Ravdin, I. S., 118
Ravenel, S. F., 226
Ravits, H. G., 287
Rawlins, T. E., 13, 161
Rawson, A. J., 292, 293
Read, F. E. M., 344
Reading, E. H., 237
Reames, H., 318
Reaume, S. E., 136, 141
Rebstock, M. C., 114
Recinos, A., Jr., 110
Redman, W., 115, 212
Reedy, R. J., 213
Reeves, R. E., 37, 39
Reeves, W. C., 151, 152
Reginster, A., 214
Regna, P. P., 117, 120, 214
Reichard, P., 87
Reid, E. B., 141
Reid, J. J. R., 106, 213
Reilly, H. C., 212
Reine, L., 11
Reiner, M., 347
Reisner, D., 344
Remy, R., 256
Reutner, T. F., 116
Revaut, P., 292
Reymann, F. E., 202
Rhodes, A. J., 158, 261, 271, 274, 276
Riazantsov, M. I., 322
Ricci, N. I., 110
Rice, C. E., 274, 275
Rice, E. C., 106, 110, 119, 225
Rice, J. S., 118
Rich, A. R., 286
Richardson, L. T., 252
Richter, M. N., 14
Riedel, G., 6, 12
Rienzo, S., 336
Riese, J. A., 109
Rigler, W. E., 249
Riley, D., 90
Riley, H. C., 253
Rippon, J. E., 23
Ris, H., 11, 138
Risso, R., 331
Rivers, T. M., 164
Robbins, B. H., 232
Robbins, F. C., 272
Robbins, M. L., 225, 227
Roberts, C., 137
Roberts, E. C., 264
Roberts, G. H., 159
Robinow, C. F., 9, 10, 138
Robinson, H. J., 352
Robinson, H. M., 113
Robinson, H. M., Jr., 113
Robinson, J. A., 209
Robinson, J. C., 133
Robinson, L. B., 113
Robinson, R., 35, 38
Robinson, R. C. V., 110, 111, 113
Robinson, W. B., 59, 60
Rode, L. J., 334
Rodenberg, A. H., 318
Rodriguez, T. R., 275
Rodriquez, J., 111
Rodwell, A. W., 93, 101, 141, 207, 208
Roepke, R. R., 83, 139
Roessler, W. G., 332
Rogers, C. H., 109
Rogers, H. J., 85
Rogers, K. B., 117, 201
Rohnick, A., 137
Roll, P. M., 90
Rona, P., 69
Rosanova, A. R., 109
Roscoe, J. D., 213
Rose, H. M., 110, 226, 231
Rosebury, T., 228, 229, 289
Rosenberg, M. L., 119
Rosenberger, H. G., 296, 304, 305, 306
Rosenblum, E. D., 85
Rosenthal, T., 106
Rosin, S., 134
Ross, R. W., 202
Ross, S., 106, 110, 119, 225, 226
Rosson, R. W., 321
Rothman, S., 284
Rotman, R., 30, 137
Rouatt, J. W., 252
Roulet, F., 40
Rountree, P. M., 25, 28, 102
Routiene, J. B., 117
Rowe, R. J., 214
Rowley, D., 8, 94, 120
Roy, G. D., 322
Rozwadowska-Dowzenko, M., 102
Rubbo, S. D., 203
Rubin, B. A., 132, 236
Ruchman, I., 315, 316
Rudd, G. V., 229
Rudniev, G. P., 324
Ruegsegger, J. M., 202
Ruffin, J. J., Jr., 323
Ruger, M., 104
Ruhe, J. S., 300
Ruiz-Sanchez, A., 110, 112, 225
Ruiz-Sanchez, F., 110, 112, 225, 338
Rullier, G., 43
Rumball, C. A., 116
Rumball, J. M., 110
Ruska, E., 1
Ruska, H., 1, 6, 8, 11, 12, 13
Rusoff, I. I., 238
Russ, S. B., 160, 263, 274
Russell, P. B., 232
Rust, E., 262
Rutenberg, A. M., 111
Ryan, F. J., 136, 142

S

Sabin, A. B., 160, 237, 263, 264, 265, 268, 274, 344, 354
Sabin, F. R., 35
Sacks, H. J., 116
Sadusk, J. F., Jr., 223
Saenz, A., 154
Saeves, J., 285
Saidel, H. F., 40, 89
St. Groth, S. F. de, see Fazekas de St. Groth, S.
St. John, E., 160, 266
St. Vincent, L., 119
Saito, M. T., 296, 301, 304, 305, 306
Sakami, W., 87
Sako, W. S., 346
Salafranca, E. S., 263
Salk, J. E., 153, 271
Sallans, B. J., 249, 251
Saltzman, A., 109
Salvin, S. B., 191, 195, 293, 297, 298, 300, 301, 302, 304
Sanchez, A. R., see Ruiz-Sanchez, A.
Sanchez, F. R., see Ruiz-Sanchez, F.
Sanders, J., 304
Sanders, M., 110, 113, 228, 238
Sandias, A., 53
Sandor, G., 42
Sandoval, A., 131
Sanford, G. B., 247, 248, 249, 251
Santavy, F., 319
Sartory, A., 45
Sartwell, H. W., 344
Saslaw, S., 237, 294, 297, 298, 301, 302, 303
Sathe, R. V., 116
Sather, G., 152, 238
Satti, M. H., 159, 269
Savage, G. M., 104
Savard, K., 80
Savoor, S. R., 224
Sawyer, C. S., 323
Sawyer, W. A., 160
Saylor, R. M., 45, 304, 306
Saz, A. K., 80
Scanlon, M. H., 346
Scaparone, M., 109
Schaaf, F., 285
Schabel, F., 228, 229
Schad, 324
Schade, A. L., 88, 89, 177
Schaeffer, M., 238, 264
Schaeffer, P., 130, 138
Schaeffer, W., 42, 48
Schatz, A., 80, 130, 138, 212
Schaub, I. G., 211, 313
Scheff, G. J., 301, 303
Scheppach, 324

Schilling, L., 226
Schlesinger, R. W., 160, 265, 270, 355
Schlingman, A. S., 114, 115, 211, 232
Schlottke, E., 57, 58
Schmidt, B., 324
Schmidt, G. A., 38, 47
Schmidt, L. H., 202, 208
Schmidt-Jensen, H. O., 59
Schmith, K., 202
Schmitt, F. O., 6
Schmitt-Krahmer, C., 60
Schneider, H. A., 163, 343, 344, 353, 354, 355
Schneider, L. K., 136
Schneierson, S. S., 103, 109
Schnitzer, R. J., 206
Schoch, M. A., 334
Schochat, J. A., 334
Schoenbach, E. B., 110, 112, 225, 231, 337, 338, 353, 356
Schoenheimer, R., 81
Schoop, G., 321
Schramm, G., 13
Schreiber, H., 113
Schuberth, H., 42
Schuhardt, V. T., 334
Schuller, A., 324
Schulten, H., 324
Schultz, A. S., 90
Schultz, E. W., 237
Schultz, F. H., Jr., 118
Schultz, H. W., 39
Schulz, J. A., 57
Schulze, L., 318
Schulze, P., 57, 58
Schuster, M.C., 14
Schwab, J. L., 114, 211, 232, 237
Schwabacher, H., 106, 206
Schwalm, S., 227, 228
Schwartz, M., 141
Schwarz, C., 57, 58, 60
Schweinburg, F. B., 111
Schwentker, F. F., 160
Schwerdt, C. E., 12
Scott, G. D., 12
Scott, G. W., 132
Scott, T. F. M., 12
Scrugham, J. F., 238
Sebrell, W. H., 351
Seeberg, G., 202
Seeler, A. O., 256, 346, 351
Seeley, D. B., 117
Segal, W., 71, 85
Segretain, G., 288
Seibert, F. B., 35, 39, 40, 41, 42, 43, 44, 46, 47
Seits, I. F., 96
Selbie, F. R., 209
Seligmann, E., 213
Sengupta, S. R., 355
Sesler, A. O., 213
Sesler, C. L., 202, 208
Sevag, M. G., 71, 94
Sexton, R. L., 300
Shaffer, J. H., 320
Shaffer, K. M., 337
Shah, M. J., 116
Shanor, L., 178, 197
Shapero, E. B., 113
Shapiro, A. L., 284
Shapiro, L. D., 287
Sharp, D. G., 6, 8, 12, 13, 21, 22, 271
Sharp, E. A., 224
Sharpless, G. P., 238
Shaw, E., 12
Shaw, E. W., 264
Sheffield, F. M. L., 13
Sheppard, C. C., 23
Sherwood, M. B., 348, 352
Shibley, G. S., 267
Shirley, D. A., 38, 47
Shoch, T. J., 74
Shooter, R. A., 103
Shope, R. E., 161
Shragg, R. I.,110, 231
Shull, G. M., 117
Shwachman, H., 113
Sickles, G. M., 264
Siegel, A., 352
Sigel, M. M., 273, 275
Sigerist, H. E., 350
Signorelli, S., 338
Sigurgeirsson, T., 13
Silva Goytia, R., 112, 337
Silver, F. F., 238
Silverman, M., 95
Silvestri, L., 29
Siminoff, P., 255
Simmonds, P. M., 249, 251
Simmonds, S., 139
Simms, B. T., 339
Simon, H. E., 231
Simon, R. D., 209
Singher, H. O., 119
Singleton, J. R., 137
Siniscal, A. A., 320
Sjösgren, B., 39
Skinner, C. E., 286, 290, 291
Skutch, E. T., 89
Slagg, C. M., 249
Slatkin, M. H., 118
Slinkina, A. G., 322
Slonimski, P., 130
Smadel, J. E., 11, 12, 114, 115, 116, 117, 160, 224, 225, 227, 228, 235, 261, 262, 263, 271, 274, 338
Smiles, J., 239
Smiljanic, A. M., 284
Smit, A. J. H., see Haagen-Smit, A. J.
Smith, A. G., 6, 7, 8, 9, 10, 26, 138, 240
Smith, C. A., 296, 301, 306
Smith, C. E., 296, 304, 305, 306, 307
Smith, D. T., 39, 286, 289, 291, 293, 294, 295, 296, 297, 299, 299
Smith, H. H., see Hull-Smith, H.
Smith, H. Williams, see Williams-Smith, H.
Smith, K. M., 13
Smith, L., 133
Smith, L. W., 118
Smith, M. G., 315
Smith, M. I., 213
Smith, P. H., 91, 92, 105, 213, 215
Smith, P. K., 225, 226, 227
Smith, R. E., 248
Smith, R. H., 288, 295
Smith, R. M., 224, 338
Smith, T., 335
Smith, W., 153, 272
Smith, W. E., 11
Smythe, P. M., 213
Snell, E. E., 84
Snell, N., 119
Snow, G. A., 39
Snyder, J. C., 223, 224, 225, 226, 227
Snyder, T. L., 313, 314
Sobel, N., 106
Sobin, B. A., 117
Soeda, M., 104
Solomon, C., 110
Solomons, I. A., 117
Som, M. L., 103
Sondag, R. F., 106
Sonne, J. C., 86
Sonneborn, T. M., 63, 129, 130, 162
Sonoda, Y., 104
Sontag, L. W., 300
Soret, M. G., see Gonzalez Soret, M.
Sörgel, G., 172, 182, 187, 189, 191
Sorsby, A., 229
Sparrow, F. K., Jr., 169, 171, 172, 180, 181, 184, 185, 190, 196
Spaulding, E. H., 214
Spendlove, G. A., 215
Sperber, E., 87
Spies, T. D., 317, 347
Spink, W. W., 107, 112, 115, 202, 205, 206, 212, 213, 214, 215, 331, 333, 334, 336, 337, 338, 339
Springer, M. E., 184
Springson, D. B., 81
Sprunt, D. H., 112, 113, 232, 237, 334, 355
Srb, A. M., 141
Stacey, M., 38, 39, 41, 47
Stadtman, E. R., 77, 78, 83
Stadtman, T. C., 77
Ställberg, S., 37
Stamp, T. C., 204
Stanier, R. Y., 82, 135, 140, 172, 173, 174, 176
Stanley, W. M., 12, 13, 14, 129, 161
Stansly, P. G., 119

Stapleton, G. E., 132
Stare, F. J., 346
Starr, R. C., 180
Stearns, B., 202, 229
Steele, J. M., 226
Steenken, W., Jr., 107, 213, 214
Steere, R. L., 13
Steers, F., 94
Steigman, A. J., 265
Stein, R. O., 295
Steinbach, M. M., 113
Steinhaus, E. A., 12, 225, 314, 320, 324
Stekol, J. A., 313
Stenhagen, E., 37
Stephenson, M., 81, 88
Stern, J. R., 92
Stern, K. G., 347
Sterzl, J., 41
Stevens, D. A., 224
Stevens, K., 110, 225
Stevenson, B. L., 334
Stewart, J. J., 106
Stewart, M. O., 268
Stewart, R. A., 285, 304
Stieg, W. F., 120
Stiller, R., 116
Stober, A. M., 295
Stoddard, J. L., 287
Stodola, F. H., 37
Stokes, H. L., 203
Stokes, J., Jr., 268
Stokes, J. L., 69, 86
Stokinger, H. E., 204
Stone, H. W., 344
Stone, J. D., 155, 234, 235, 272, 275
Stone, W. S., 132, 134, 135, 137
Stovall, W. D., 293
Strauss, B. S., 140
Strauss, E., 202
Strauss, M. J., 12
Strecker, H., 80
Street, H. R., 39
Strehler, B. L., 139
Streightoff, F., 204
Strelitz, F., 239
Stuart, B. M., 319
Stuart-Harris, C. H., 155, 225, 266
Stubblefield, E., 213
Stubbs, L. E., 110
Stüben, H., 172, 179, 183
Styles, H., 119
SubbaRow, Y., 238
Sugg, J. Y., 153, 154, 155, 156, 157, 165
Sulkin, S. E., 238
Sulzberger, M. B., 287, 291, 297
Summers, W. A., 108
Surkis, S. Z., 231
Sussman, M. L., 103
Sutter, E., 285
Sutton, M., 253
Suyemoto, W., 317
Svedmyr, A., 271
Swanson, C. P., 135
Swedberg, B., 214
Sweet, L. K., 225
Sweigert, C. F., 305, 306
Syverton, J., 356
Szanto, P. B., 237
Szilard, L., 23, 133
Szobel, D. A., 237

T

Takahashi, W. N., 13, 161
Taliaferro, W. H., 345
Tamura, J. T., 314, 315, 317, 319, 325
Tang, Y. W., 131
Tartakow, I. J., 323
Tashman, S. G., 109
Tatum, E. L., 129, 130, 131, 136, 138, 139, 140, 141
Taussig, H. B., 344
Tavlitzki, J., 130
Taylor, A. R., 6, 12, 13
Taylor, E., 265
Taylor, E. S., 141
Taylor, H. E., 131
Taylor, H. L., 348, 355
Taylor, R. M., 154
Taylor, R. W., 109, 110
Tchan, Y. T., 25
Tempel, C. W., 214
Tenenberg, D. J., 297, 301, 302
Teter, H. E., 183, 184, 187, 188
Tetrault, P. A., 120
Theiler, M., 159, 160
Thelen, H. M., 110, 225
Thimann, K. V., 177
Thjøtta, T., 322
Thomas, R. C., 250, 253
Thompson, H. P., 14
Thompson, R. L., 232
Thompson, W. R., 274
Thomson, E. F., 102
Thornberry, H. H., 23
Thygeson, P., 228, 229
Tichenor, C. J., 226
Tierney, N. A., 226
Tigertt, W. D., 263
Tillett, W. S., 204
Tillman, C., 315
Timpanelli, A., 103
Tiselius, A., 12, 40, 42, 43
Todd, C. M., 39
Todd, E. W., 205, 206
Todd, H. P., 115, 118
Todd, R. L., 292
Toennies, G., 80
Toharsky, B., 109
Toljurst, J. C., 287
Tompsett, R., 103
Tonhazy, N. E., 92, 105
Toomey, J. A., 229, 238
Topping, N. H., 225
Torbet, V., 300
Torrey, G. S., 177
Torriani, A., 74, 133
Totten, E. L., 139
Tovar, R. M., 318, 321
Tracy, A., 214
Trager, W., 54, 63, 163, 343, 351, 353, 355
Traub, R., 117, 224
Traum, J., 304, 306
Tremeau, R., 43
Trice, E. R., 110, 111
Trier, H. J., 57, 62
Tripi, H. B., 231, 232, 235
Troppoli, A. V., 203
Troutman, H. D., 114
Trucco, R. E., 67, 68, 86
Turnit, H., 13
Tsao, C. C. L., 205
Tsareva, M. I., 324
Tsuchida, M., 82
Tsuchiya, H. M., 286, 290
Tubeuf, C. v., 250
Tukey, J. W., 44
Tulasne, R., 10, 138
Tullis, J. L., 226
Tumulty, P. A., 209
Tuohy, J. H., 321
Turfitt, G. E., 80
Turgasen, F. E., 228
Turner, G. S., 205, 206
Turner, J. W., 305, 306
Twible, E., 110

U

Uchida, M., 104
Umbreit, W. W., 81, 91, 92, 105, 140, 213, 215
Underdahl, N. R., 237
Updegraff, D. M., 85
Urbach, E., 287
Urschel, D. L., 338
Usuelli, F., 57, 58
Utech, N. M., 256
Utter, M. F., 76
Utz, J. P., 263

V

Vakil, R. J., see Jal Vakil, R.
Valleau, W. D., 250
van Allen, A., 227, 228, 230
Vance, A. W., 1, 5, 7, 13
van den Berg, R., 202
van den Ende, M., 225, 227, 232, 234, 236
Vanderlinde, R. J., 141, 214, 215
van Herick, W., 153
van Iterson, W., 8, 9, 10
Van Meerendonk, P., 227
Van Pernis, P. A., 300
Van Rooyen, C. E., 12, 158, 235, 261, 271, 274, 276
Van Schaak, V., 254
Van Thiel, W. J., 274

van Wagtendonk, W. J., see Wagtendonk, W. J. van
Varela, G., 224, 321
Velick, S. F., 38
Vellus, L., 96
Vennesland, K., 212, 214
Vereninova, N. K., 316
Verge, J., 269
Verlinde, J. D., 268, 271
Verona, O., 53
Victoria, M., 106
Vignati, J., 319
Vilarroel, M., 117
Villafane-Lastra, T., 336
Vinson, J. W., 117
Vischer, E., 40, 89
Vivino, J. J., 202, 205, 206
Volfertz, A. A., 322
Vollmer, H., 300, 304
Vollum, R. L., 213
von Borries, B., see Borries, B. v.
von Minden, M., see Minden, M. v.
Voureka, A., 206
Vrozek, J., 348, 355

W

Wagner, J. C., 227, 228, 229, 262, 270
Wagner, J. F., 160
Wagner, R. P., 132, 134, 140, 142
Wagtendonk, W. J. van, 61
Wahl, H. A., 189
Wahl, R , 22, 26, 28
Waisbren, B. A., 109
Waisman, H. A., 345, 348, 353
Waksman, S. A., 104, 119, 120, 212, 214, 215, 247, 252, 253, 255
Waletsky, E., 350
Walker, A., 39
Walker, D. L., 266, 273
Walker, J., 225, 226, 227
Walker, R. V. L., 275
Walker, W. W., 331, 336
Wallace, B., 132, 136
Wallace, G. I., 84
Walton, R. B., 120
Wammock, V. S., 111, 117
Wang, C. I , 155
Wannamaker, L. W., 106
Ward, R., 238
Ward, T G., 265
Warren, J., 160, 238, 263, 274
Warren, J. R., 248
Warring, W. B., 323
Warszewski, E., 109
Washburn, A. M., 321
Washington, J. A., 106, 110, 119, 225
Wasser, H. B., 12
Wassermann, M., 213
Wath, J. G. van der, 57, 58, 59, 60, 62
Watson, D. W., 39, 40, 41, 43, 48
Watson, E. A., 162
Weaver, J. A., 324
Webb, A. B., 85
Webster, L. T., 152, 163, 343, 344, 354
Weichsel, M., 106
Weil, A. J., 130
Weil, M. L., 12, 238, 274
Weill, A., 294
Weindling, R., 247, 248, 251
Weineck, E., 57
Weinstein, L., 205
Weinstein, S., 111
Weiser, R. S., 119
Weiss, A., 305, 307
Weiss, C., 291
Weiss, L. J., 11
Weitkamp, A. W., 284
Welch, F. V., 239
Welch, H., 103, 211
Wellman, W. E., 109, 110
Wells, A. Q., 47
Wells, E. B., 108, 110, 211, 228, 231, 315
Wells, H. G., 35
Wereninow, A., 57
Werkman, C. H., 75, 76, 94
West, E. J., 264
West, H. D., 119
West, P. M., 252
West, R. M., 111, 117
Westergaard, M., 134
Weston, W. H., Jr., 182, 189, 191
Westphal, A., 57
Westphal, L., 202
Westwood, M. A., 272
Weyer, F., 11
Whatley, L. R., 271
Wheeler, H. A., 236
Whelton, R. L., 108
Whiffen, A. J., 171, 172, 174, 175, 176, 183, 184, 188, 196, 197, 254
Whipple, G. H., 344, 347
White, M. H. G., see Gleeson-White, M. H.,
Whitehouse, H. L. K., 143, 183
Whiting, G., 296, 304, 305, 306
Whitlock, C. M., Jr., 109
Whitman, L., 262, 265
Whitney, D. M., 107, 224
Whittle, J., 202
Wiame, J. M., 74
Wichelhausen, R. H., 113
Widal, F. P., 294
Widström, G., 214
Wiener, A., 230
Wiener, M., 266
Wiggal, R. H., 111
Wikler, A., 291
Wilcox, C., 212, 213
Wile, W. J., 9
Wilhelm, P. L., 314
Wilkin, M. L., 232
Wilkinson, J. F., 68
Wilkinson, R. H., 106
Willcox, R. R., 111
Willett, F. M., 305, 307
Willett, J. C., 318
Williams, B., Jr., 229, 231
Williams, C. M., 287
Williams, D. J., 275
Williams, E. G., 291
Williams, R. B., 321
Williams, R. C., 5, 6, 12, 13
Williams, R. C., Jr., 21
Williams, S. E., 229
Williams-Smith, H., 23, 25
Williston, E. H., 212, 213
Wilson, A. T., 203
Wilson, C., 213
Wilson, C. M., 138, 179, 188, 191, 192, 193
Wilson, D., 346
Wilson, G. S., 23
Wilson, H. E., 237
Wilson, J. B., 332
Wilson, P. W., 71, 85
Wilson, W. W., 103
Winchester, M. E., 202
Winge, O., 137
Winkler, K. C., 83
Winner, H. I., 206
Winogradow, M., 57
Winogradowa-Fedorowa, T., 57, 60
Winslow, N. S., 273
Winsten, W. A., 215
Wintermere, D., 109
Wise, F., 297
Wiseman, R. W., 227, 228, 229
Wisnicky, W., 46
Wissler, R. W., 345, 347
Witkin, E. M., 132, 133, 134, 135, 136, 137
Wittenberg, H. J., 318
Woensdreght, M. G., 287
Wohler, G., 285
Wohlfeil, T., 319
Wolbach, S. B., 349, 350
Wolcyra, S., 256
Wolf, A., 290
Wolf, F. A., 13
Wolf, L. M., 115
Wolfe, D. M., 275
Wolferth, C. C., 209
Wolinsky, E., 107, 213, 214
Wollman, E., 136
Wollridge, R. L., 345
Wolochow, H., 74, 75
Womack, F. C., 314, 335
Wong, S. C., 107, 224, 228, 231, 232, 233, 238
Wood, H. G., 75, 76, 80, 238
Wood, R. M., 112, 338
Wood, W. A., 81, 140
Woodruff, H. B., 120, 255
Woods, D. D., 204
Woodward, J. M., 316
Woodward, T. F., 112, 116, 117

224, 226, 228, 317, 320, 338
Wooley, J. G., 26, 351
Woolley, D.W., 28, 234, 239, 256
Woolpert, O. C., 237
Work, E., 48
Wright, J. T., 159
Wright, L. T., 110, 111, 113, 228
Wright, S., 129, 142
Wuerthele-Caspe, V., 14
Wyckoff, R. W. G., 1, 5, 6, 7, 12, 13, 14, 21, 26
Wydler, H., 40
Wyss, O., 132, 134, 135, 137, 138

Y

Yager, R. H., 271, 273
Yamada, R., 263
Yanofsky, C., 139
Yaoi, H., 265
Yarwood, C. E., 247
Yaw, K. E., 137, 194
Yeager, G. H., 113
Yegian, D., 141, 202, 214, 215
Yen, A. C., 292
Yeomans, A., 223, 225, 226
Youmans, G. P., 212, 213
Young, C. C., 203
Young, G. A., 237
Young, I., 274
Young, J. E., 304
Young, R. M., 104
Yow, E. M., 112, 115, 212, 214
Yu, P. C., 271

Z

Zabalaga Canelas, E., 117
Zabin, I., 139
Zach, F., 287
Zalokar, M., 141
Zamenhof, S., 40, 89, 90
Zanaldi, L., 335
Zarafonetis, C., 238
Zarafonetis, C. J. D., 223, 225, 226
Zechmeister, L., 131
Zeller, E. A., 40, 105
Zellmer, C. E., 344
Zheutlin, H. E. C., 110, 111
Ziegler, A. E., 178
Zimmer, K. G., 129, 132
Zingher, A., 344
Zinsser, H., 350, 353, 356
Zintel, H. A., 118
Zwerling, H. B., 300
Zworykin, V. K., 1, 5, 7, 13

A

Acetic acid, termite metabolism and, 54-55
Acetyl phosphate, and bacterial fatty acid synthesis, 78-80
Achlya, gynandromictic reproduction in, hormones and, 186-87
Acid fastness of tubercle bacilli, 37
Acridines
and bacteriophage, 240
and influenza virus, 235
and psittacosis lymphogranuloma group, 230
and rickettsial infections, 226-27
Actinomycosis, immunology of, 288-90
Adenosine 5-phosphate and nitrogen metabolism, 81
Aerobacter aerogenes
carbon dioxide replacement in, 76
and plant viruses, 255-56
Agglutination test
for Blastomyces dermatitidis, 298
for brucellosis, 333
for Candida albicans, 292-93
for Histoplasma capsulatum, 303
Algae, mutualisms with protozoa, 61, 62
Allelisms, see Variation
Allergic response
to Blastomyces dermatitidis, 295-96, 297
to Coccidioides immitis, 305
to ringworm infections, 285-86
to Sporotrichum schenckii, 294-95
to tubercle bacilli, 45
Allergy test for brucellosis, 333-34
Allomyces
chromosome loss in, 193-94
cytogenetics of, 192-93
hybrids of, natural, 193-94
life cycles in, 187
meiosis in, 188
hybrids and, 193
nuclear cytology of, reviews on, 188
sex determination in, inheritance of, 182
sexuality in, 183-84
taxonomy of, experimental, variability and, 197
Allomyces arbuscula, chromosomes in, haploid number of, 192-93
Allomyces javanicus var. macrogynus, chromosomes in, haploid number of, 192-93
p-Aminobenzoic acid
and rickettsial infections, 225-26
streptomycin synergism with, rickettsial infections and, 224
sulfonamide inhibition by, 204
psittacosis-lymphogranuloma group and, 229-30
p-Aminosalicyclic acid and streptomycin resistance, 214
Anaphylaxis and Candida albicans, 292
Antibiosis, in plant pathogens, 247-57
antibiotic microorganisms and, 247-50
antibiotics and, 253-55
culture studies of, 253-54
disease control, 254
soil-borne diseases, 254-55
bacteria, 250
and disease control, 250-53, 254
bacterial diseases, 252-53
fungal diseases, 250-52
fungi, 247-50
obligate parasites of, 247-48
seed-borne, 249
soil-borne, 248-50
seed inoculation, review on, 251
viruses, 255-57
Antibiotics, 101-20
antifungal, 119-20
bacterial resistance to, 201-16
and brucellosis, 337-38
and intermediary metabolism, 90-96
mutations and, 131, 141
in plant diseases, 253-55
production of, in soil, 255
and tularemia, 317-18
see also Mutations and specific substances
Antibodies, formation of, protein deficiency and, 345
Antigens
penicillin resistance and, 208
in ringworm group, 285
of tubercle bacilli, 46-48
Aspartic acid decarboxylase in metabolism, 95
Aspergillus, phage inhibition by, 239
Aspergillus niger, on plant viruses, 255-56
Atabrine, growth inhibition by, 95-96
Aureomycin, 106-14, 210-11
aluminum hydroxide and, 109
amoebiasis and, 112
antimicrobial activity of, 106-8
assay methods for, in body fluids, 108, 109
bacterial resistance to, 106-7, 210-11
and brucellosis, 112, 337-38
clinical investigations on, 109-14
culture conditions and, 211
intestinal bacteria and, 112
penicillin resistance and, 111-12
and peritonitis, 113
and pertussis, 112
pharmacologic aspects of, 108-9
and primary atypical pneumonia, 231
properties of, 106
and psittacosis-lymphogranuloma group, 228
reactions to, human, 109
and rickettsial infections, 107, 110, 224-25
and skin infections, 113
and systemic infections, 113-14
toxicity of, 109
and tularemia, 112-13, 317-18, 320
and urinary tract infections, 110-11
and venereal infections, 111
and virus infections, 110
Azotobacter vinelandii
carbon dioxide fixation by, 75-76
hydroxylamine as nitrogen source for, 85-86

B

Bacillus cereus, streptomycin and, 91
Bacillus mycoides, electron microscopy of, nuclei and, 10
Bacillus subtilis, penicillin and, 94
Bacitracin, 118
nephrotoxicity of, 118
topical use of, 118
Bacteria
and antibiosis, see under Antibiosis
aureomycin and, 106-8, 112
chloramphenicol and, 114, 211-12
p-cresol producing, 85
cytology of, review on, 138
electron microscopy of, 7-11

flagella of, attachment point of, 8-9
genetic recombination in, 137
genetics of, review on, 131
gram negative
aureomycin and, 107
chloramphenicol and, 115
polymyxins and, 118
streptomycin resistance of, in vitro, 212
gram positive
aureomycin and, 107
chloramphenicol and, 115
infection, experimental, vitamin B deficiency and, 351-53
life cycles in, electron microscopy of, 11
morphology of, electron microscopy of, 7-11
mutation rate of, phenotypic lag and, 131-32
mutualisms with protozoa, 62-63
neoplasms and, 14-15
penicillin resistance, 205
permanence of, 205-6
phage-resistant mutations of, 29
phage-typing of, 23 24
phenol producing, 85
resistance to chemotherapeutic agents, 201-16
mutation theory of, 210
theories for, 201
see also specific organisms and substances
respiration in, hydrocarbons on, 80
ruminant digestion and, 57, 58, 59, 61
streptomycin resistance, 212
tricarboxylic acid cycle in, 92
Bacteriophage, 21-32
acridines and, 240
adsorption of, 24-25
antimetabolites and, 239-40
and bacterial typing, 23-24
chemical composition of, 22-23
chemotherapy and, 239-41
review on, 239
diffusion rates of, T3 and T4, 23
genetic recombination between, reviews on, 29-30
genetics of, 29-30
growth requirements of, 26-28
review on, 26
host-virus relationships, 23-28
inhibition by polysaccharides, 239
intracellular growth of, 25-26
lysis by, 28
lysogenicity and, 28
metabolic inhibitors and, 26
morphology of, 13-14, 21-22
multiplication of, calcium and, 26-27
mutagenic agents and, 29
mutual reactivation, 30
photoreactivation of, 27-28
and plant disease control, 252-53
and plant pathogen antibiosis, 250
proflavine and, 240
radiation on, 23
research methods, 30-32
resistant mutants, 29
thermal inactivation of, T phages, 22
thymol resistance of, 22
Bacterium tularense
aureomycin and, 107
cultivation of, 313-14
metabolism of, 314-15
morphology of, 313
sugar fermentations by, 319
susceptibility to, 315
Biotin
antagonists of, 96
carbon dioxide fixation and, 95
coenzyme form of, in metabolism , 95
Blastocladia
life cycles in, 188
pure cultures of, 175
sexuality in, 184
taxonomy of, experimental, variability and, 197
Blastocladiales
life cycles in, 187-91
meiosis in, asexual spores and, 179
sexuality in, 181-84
taxonomy of, experimental, variability and, 197
Blastocladiella
life cycles in, 187-88
sex determination in, phenotypic, 182-83
sexuality in, 183-84
Blastocladiella stübenii, sexuality in, 183
Blastomyces dermatitidis
cross reactivity
with Coccidioides immitis, 296
with Histoplasma capsulatum, 296, 297-98
immunology of, 295-99
iodide therapy and, 299
Blastomycosis, immunology of, 295-99
Brucella
aureomycin and, 107
classification of, biochemical methods for, 332
growth requirements of, 332
host relationship, 331-32
immunochemistry of, reviews on, 332
variation in, 332-33
Brucella abortus, brucellosis pathology and, 336
Brucella melitensis, brucellosis pathology and, 336
Brucellosis, 331-39
blood culture for, 334
and cirrhosis of the liver, 336
control and eradication of, 338-39
laboratory diagnosis of, 333-35
leucocytic picture in, 334
pathogenesis of, 335
pathology of, 335-36
tests for, evaluation of, 334-35
therapy of, 336-38
review on, 336-37
tuberculosis and, 335

C

Candida albicans
cross reactivity with Saccharomyces cerevisae, 293
immunology of, 291-94
Carbohydrates
metabolism of
intermediary, 67-77
in protozoa-ruminant mutualisms, 57-58
in protozoa-termite mutualisms, 53-55
see also Metabolism, specific organisms and substances
of tubercle bacilli, 38-39
see also Mutations, biochemical and specific substances
Carbon dioxide
fixation of, intermediary carbohydrate metabolism and, 75-76
replacement, in heterotrophs, 76
Catenaria
life cycles in, 188
sexuality in, 183-84
Cellulose fermentation by protozoa, 53-55, 57
Cetavlon on intermediary nitrogen metabolism, 81
Chemotherapy
of rickettsial infections, 223-27
of virus infections, 227-41
see also specific agents,

diseases and organisms
Chlorella, mutations in, photosynthetic, 138
Chloramphenicol, 114-17,211-12
antimicrobial activity of, 114-15
bacterial resistance to, 211-12
and brucellosis, 338
clinical investigations on, 116-17
pharmacologic aspects of, 115-16
and primary atypical pneumonia, 231
and psittacosis-lymphogranuloma group, 228
reactions to, human, 116
and rickettsial infections, 224
and scrub typhus, 117
synthesis of, artificial, 114
systemic infections and, 117
toxicity of, 116
and typhoid fever, 116-17
Chytridiales
isolation of, 171-73
life cycles in, 190-91
sexuality in, 180-81
taxonomy of, experimental, variability and, 195-97
Clostridium acidiurici, purine metabolism of, 86-87
Clostridium kluyveri, fatty acid synthesis by, 77-80
Clostridium saccharobutyricum
coenzyme A synthesis by, 95
fumarate fermentation by, 70-71
Clostridium sporogenes, nucleotide degradation in, penicillin on, 93
Clostridium tetani, glucose fermentation by mutant of 71
Clostridium welchii, intermediary nitrogen metabolism of, 81
Cobalt
growth inhibition by, 88
nucleic acid metabolism and, 89
Coccidioides immitis
cross reactivity with Histoplasma capsulatum, 306
immunology of, 303–7
Coccidioidin, 304
and coccidiomycosis prognosis, 306-7
Coccidiomycosis
immunology of, 303-7
prognosis of
coccidioidin and, 306-7
complement-fixation test and, 307
Coenzyme A in metabolism, 95
Cofactors
and bacteriophage adsorption, 24
in glucose fermentation, 71
in intermediary metabolism, 95-96
Complement-fixation test
for Blastomyces dermatitidis, 297-98
for Coccidioides immitis, 307
and coccidiomycosis prognosis, 307
for Histoplasma capsulatum, 301-3
indirect, for viral infections, 276
for viral infections, 274-76
Corynebacterium diphtheriae
starch synthesis by, 74-75
succinoxidase system of, 72
Cross-resistance test for viral infections, 266-71
Cryptocercus punctulatus, glucose absorption by, 55
Cryptococcus neoformans, immunology of, 287-88
Cytochrome in mycobacteria, 39

D

Darluca filum as fungus antibiotic, 248
Desoxyribunucleic acid
and specific heritable alterations, 130-31
synthesis of, radiation resistance and, 132
Diagnostic tests, see specific tests
Diplococcus pneumoniae, sulfathiazole and, 94-95
Diplodinium and ruminant digestion, 57-58

E

Endamoeba histolytica, aureomycin on, in vitro action of, 107, 112
Endocarditis
bacterial
penicillin prophylaxis in, 104
penicillin resistance in, 209
Endotoxins, succinoxidase in, 71-72
Enzymes
genetic control of, 142
in hydrogen transfer, penicillin on, 94
mutations and, 140
penicillin resistance and, 208
in polysaccharide synthesis, 73-74
streptomycin and, 105
of tubercle bacilli, 40
Escherichia coli
carbon dioxide fixation by,76
chemical mutagens on, 134
electron microscopy of, nuclei and, 10
genetic recombination in,137
glucose fermentation by, 69-70
intermediary carbohydrate metabolism of, pentose and, 72-73
intermediary metabolism of, streptomycin on, 105
intermediary nitrogen metabolism of, 81, 82, 85
p-aminobenzoic acidless mutant and, 83-84
metabolism of
citrate formation in, 92
streptomycin and, 91-92
mutations in, suppressor,130
nucleic acids in
phosphorous distribution and, 88
synthesis of, 88
nucleotide degradation in, penicillin on, 93
phage resistance in, ribonucleic acid and, 132
phosphorylation in, 67-68
polysaccharide synthesis in, 74
radiation resistant mutant of, 132
Escherichia coli B, internal alterations of, by T phage, 25-26
Euallomyces
genetics of, 192-94
life cycles in, deviations in, 191
sex determination in, phenotypic, 181-82
Euglena, variations in, extrachromosomal changes and, 130
Evolution
genetics and, 142-43
mutualisms and, 63-64

F

Fats, metabolism of, 77-80
Fatty acids
synthesis of, bacterial, 77-80
2-carbon multiple condensation in, 78-80
Fermentation
intermediary carbohydrate metabolism and, 69-72
see also Carbohydrates,

metabolism of; specific organisms and substances
Fumarate, fermentation of, by Clostridium saccharobutyricum, 70-71
Fungi
and antibiosis, see under Antibiosis
aquatic, see Phycomycetes, aquatic
genetics of, 136-37
human susceptibility to, 284-85
immunology of, see Mycoses, human

G

Genetics
biochemical, 138-42
brachymeiosis, theory of, 137-38
genetic change, environmental selection and, 135-36
of gynandromixis, 185-86
and infection susceptibility, 343-44
of microorganisms, 129-50
evolution and, 142-43
reviews on, 129
radiation and, 132-33
recombination in bacteria and viruses, 137
transmission and recombination, mechanism of, 136-38
see also Mutations, Variation and under Bacteria, Viruses, etc.
Glucose
fermentation of, cofactors in, 71
termite metabolism and, 54
Glycogen
metabolism of, in protozoa-ruminant mutualisms, 58
synthesis of, endotoxins on, 71
Growth
inhibition of
by atabrine, 95-96
by cobalt, 88
mutations and, 141-42
by natural amino acids, 141
rate of, cobalt on, 89
see also Bacteriophage
Gynandromixis, see under Phycomycetes, aquatic

H

Harden-Young effect, 67
Hemagglutination
variation in, influenza virus, 155-58
virus pathogenicity and, 155
Hemagglutination inhibition test for viral infections, 271-74
Hemophilus influenza, type B, streptomycin and, 105
Hemophilus pertussis, aureomycin and, 107-8
Heterothallism
in leptomitaceae, 185-87
in saprolegniaceae, 185-87
Heterotrophs, carbon dioxide replacement in, 76
Histidine in purine synthesis, 84
Histoplasma capsulatum
cross reactivity
with Candida albicans, 302
with Coccidioides immitis, 301, 302, 306
with Mycobacterium tuberculosis, 299-300
immunology of, 299-303
and tuberculin reaction, 45
Histoplasmin, 300
and tuberculin reaction, 45
Histoplasmosis, immunology of, 299-303
Hormones and gynandromictic reproduction, 186-87
Hyaluronidase and penicillin diffusion, 103

I

Immunity
acquired, in ringworm infections, 285-86
active, against tularemia, 315-16
passive, against tularemia, 316
to tubercle bacilli, 46-48
to viruses, local versus humoral, 270

K

Kappa
cytoplasmic basis of, review on, 130
paramecin and, 63
Paramecium aurelia and, mutualism in, 63

L

Lactic acid bacteria, histidine synthesis in, mechanism of, 84
Lactobacillus arabinosus
carbon dioxide fixation by, 75
cystine substitutes in, 84
Lactobacillus casei, histidine synthesis in, 84
Leptomitaceae, heterothallism in, 185-87
Leuconostoc mesenteroides, cystine substitutes in, 84
Lysine, lysis and, 80-81

M

Meiosis in aquatic phycomycetes, 179, 188-90, 193
Metabolism
bacterial, 67-96
carbohydrate, see Metabolism, intermediary carbohydrate
fat
fatty acid synthesis and, 77-80
steroids and, 80
intermediary, antibiotics on, 90-96
intermediary carbohydrate, 67-77
bacterial photosynthesis and, 76-77
carbon dioxide fixation in, 75-76
fermentation and, 69-72
Harden-Young effect, 67
pentose metabolism, 72-73
phosphorylation, 67-69
photosynthesis and, 76-77
polysaccharides and, 73-75
nitrogen, 80-90
amino acids and, 80-85
nitrogen fixation, 85-86
nucleic acids and, 87-90
purines and, 86-87
see also specific organisms and substances
Micrococcus pyogenes
penicillin resistance in, incidence of, 102
penicillinase in, penicillin resistance and, 102
Micrococcus pyogenes var. aureus
penicillin resistance in biochemical changes and, 207
morphology and, 206-7
permanence of, 205, 206
in vivo development of, 208-9
Microorganisms
cytogenetics of, 137-38
neoplasms and, 14-15
Microscopy, electron, 1-15
application range, 1-4
artifacts, 4, 21
contrast in, 3-4, 5-6
mounting techniques, 6-7
resolving power, 1-2, 3
specimen preparation, 5-7
see also under Bacteria, Rickettsiae and Viruses
Minerals and infection, experimental, 348-49
Moniliasis

immunology of, 291-94
moniliids and, 292
Monoblepharidales, sexuality in, 184-85
Mutagenic agents
back-mutations and, 134
and bacteriophage, 29
lethal action of, 132
Mutations
antibiotics and, 131, 141
back-mutations, mutagenic agents and, 134
and bacterial resistance to drugs, 210
of bacteriophage, 29
biochemical, 138-42
and aliphatic amino acid synthesis, 140
antibiotics and, 141
and carbohydrate utilization, 138-39
enzymes and, 140
and gene-enzyme relations, 140-42
and growth inhibition, 141-42
Krebs cycle and, 139
nutrilite biosynthesis and, 139-40
and penicillin resistance, 141
and tryptophane metabolism, 139-40
chemical mutagenesis, 133-35
mutation pattern and, 134-35
chromosome loss in, 193-94
directed, 133-34
antiserum and, 162-63
environmental selection and, 135-36, 161
gene, 131-35
induced, and streptomycin production, 104-5
mutagenesis, mechanism of, 135
mutants, recovery of, 131
and nutrilite biosynthesis, reviews on, 139
peroxides on, 134
to phage resistance, 29
photosynthetic, 138
radiation induced, 132-33
photoreactivation and, 133
tobacco mosaic virus and, 161
rate of
in animal viruses, 161-62
phenotypic lag and, 131-32
reviews on, 135
in tobacco mosaic virus, 161
spontaneous, penicillin resistance and, 102
suppressor, synthesis and, 130
thermophily and, 131
in viruses, 161-63
see also Genetics, Variation and specific organisms
Mutualisms
and evolution, 63-64
in protozoa, 53-64
Mycobacteria
constituents of, 35-48
reviews on, 35
culture filtrate constituents of, 35
table, 37
enzymes of, 40
nucleic acids and nucleoproteins of, 40-41
review on, 41
pigments of, 39
respiration of, hydrocarbons on, 80
Mycobacterium smegmatis, enzymes in, streptomycin on, 105
Mycobacterium tuberculosis
aureomycin and, 107
cross reactivity with Nocardia asteroides, 290-91
streptomycin resistance in, in vivo development of, 213, 214
see also Tubercle bacilli
Mycobacterium tuberculosis var. avian, nucleic acids in, composition of, 89-90
Mycolic acid, tubercle bacilli and, 37
Mycoses, human
antigenicity in, 283-84
immunology of, 283-307
see also specific diseases and fungi
ringworm infections, immunology of, 285-86
susceptibility in, 284-85
systemic
id phenomenon in, 286-87
immunology of, 286-307

N

Neisseria, penicillin and, mode of action of, 101
Neisseria perflava, polysaccharide synthesis in, 73-74
Neoplasms, microorganisms and, 14-15
Neurospora
alleles in, heterocatalytic expression of, 130
biochemical mutations in and aliphatic amino acid synthesis, 140
and carbohydrate utilization, 139
mutations in, suppressor, 130
radiation, ultraviolet, lethal mutation and, 132
sulfanilamide dependence in, 141
variation in, extrachromosomal changes and, 130
Neutralization test for viral infections, 261-66
Nitrogen
fixation of, 85-86
metabolism of, in protozoa mutualisms, 55-56
Nocardia asteroides cross reactivity with Mycobacterium tuberculosis, 290-91
Nocardiosis, immunology of, 290-91
Nucleic acids
labeled, source of, 90
metabolism of, cobalt on, 89
in mycobacteria, 40-41
and nitrogen metabolism, 87-90
Nucleoproteins, in mycobacteria, 40-41
Nutrition
and infection, experimental, 343-56
minerals, 348-49
proteins, 344-48
undetermined factors in, 354-55
vitamins, 349-54
see also specific organisms and substances
and infection, reviews on, 343
and infection susceptibility, 344

O

Oidiomycin and Candida albicans, 291
Ophibobolus graminis, control of, soil modification and, 251
Opsonocytophagic test for brucellosis, 334
Orbitolites, respiration of, zooxanthellae and, 62
Oxaloacetate, formation by Clostridium saccharobutyricum, 70-71

P

Paramecin, kappa and, 63
Paramecium, variations in, extrachromosomal changes and, 130
Paramecium aurelia
kappa and, mutualism in, 63
killer factor in, 63
Paramecium bursaria
algae-free culture of, 61
zoochlorellae in, pure culture

of, 61
Penicillin, 101-4, 205-10
action of
n ode of, 101
prolongation of, 103
bacterial resistance to, 205-10
antigenic changes and, 208
aureomycin and, 111-12
bacterial endocarditis and, 209
biochemical changes in, 207-8
clinical observations on, 209-10
cold storage and, 205
and morphology, 206-7
mutation theory of, 210
mutations and, 141
penicillinase and, 208
permanence of, in vitro, 205-6
sensitive strains on, 206
spontaneous mutation and, 102
in vivo development of, 208-9
and bacteriophage, 239
and biochemical mutant isolation, 102
and blood coagulation, 103-4
diffusion of, hyaluronidase and, 103
and intermediary metabolism, 92-94
nucleotide degradation and, 93
pharmocologic aspects of, 101
and psittacosis-lymphogranuloma group, 227-28
reviews on, 101
and rickettsial infections, 223
therapy, 103-4
Penicillinase, penicillin resistance and, 102
Phenotypic lag and mutation rate, 131-32
Photoreactivation
of bacteriophages, 27-28
ultraviolet mutagenesis and, 133
Phthiocerol, tubercle bacilli and, 37-38
Phycomycetes, aquatic, 169-98
biflagellate series of
heterothallism in, 185-87
sexual types in, 185
collection and isolation of, 171-73
genetics of, 191-94
growth of, 173-76
gynandromictic reproduction, hormones and, 186-87
gynandromixis in, 185-86
life cycles in
deviations in, 191
haplontic and diplontic, 189
nuclear cytology and, 187-91
meiospores and mitospores, 188-89
nuclear cytology of, 188-90
nutrition and metabolism of, reviews on, 177
pure cultures of, 170-77
culture media and, 175-77
two membered, 176-77
irom zoospores, 174-75
reviews on, 169
sexuality in, 180-87
reviews on, 180, 185
spore germination, 177-80
asexually formed, 179
maturation and, 178-80
meiosis in, 179
sexually formed, 178-79
starvation and, 179-80
taxonomy of, experimental, 194-98
host-specificity and, 197-98
variability and, 194-97
uniflagellate series of, evolution in, 190-91
zoospores of, R. S. zoospores, 188-89
see also specific genera and species
Phymatotrichum omnivorum, corn seedling immunity to, 249
Plant diseases, see Antibiosis
Plasmodium cathemerium, biotin deficiency and, 351
Plasmodium gallinaceum, pantothenic acid deficiency and, 350-51
Plasmodium lophurae
biotin deficiency and, 351
protein deficiency and, 346
riboflavin deficiency and, 351
Pneumococci
mineral deficiency and, 348
penicillin resistant, in vivo development of, 208
protein deficiency and, 346
sulfonamide resistant, 201-2
biochemical changes in, 204
vitamin B deficiency and, 351-52
Pneumococcus, variations in, desoxyribonucleic acid and, 130-31
Pneumonia
primary atypical, chemotherapy and, 231
primary tularemic, incidence of, 325
Polymyxins, 118-19
Precipitin test for Histoplasma capsulatum, 303
Proctodeal feeding
nitrogen metabolism of, 55-56
protozoa transfer in, 56
termites and, 55-56
Propionibacterium pentosaceum, phosphorylation in, 68-69
Proteins and infection, expermental, 344-48
Protozoa
infection, experimental, vitamin B deficiency and, 351
intracellular microbes and, 61-64
nonphotosynthetic, 62-64
see also Orbitolites and Paramecium bursaria
mutualisms in, 53-64
mutualisms with ruminants, 56-61
carbohydrate metabolism in, 57-58
nitrogen metabolism in, 58-61
mutualisms with termites, 53-56
carbohydrate metabolism, 53-55
fermentation hypothesis, 54-55
nitrogen metabolism, 55-56
protozoa multiplication and transfer in, 56
as nitrogen source in ruminants, 60
ruminant digestion and, 59-60
Proteins of tubercle bacilli, 41-43
Proteus vulgaris
flagella of, attachment point of, 8-9
nucleic acid metabolism of, cobalt on, 89
Pseudomonas putrefaciens, polysaccharide metabolism of, 74
Pseudomonas saccharophila, polysaccharide synthesis by, 75
Purines
Clostridium acidiurici metabolism of, 86-87
in histidine synthesis, 84

Q

Q fever, aureomycin and, 225
Quellung reaction
and Cryptococcus neoformans, 288
and Sporotrichum schenchkii, 295

R

Radiation
bacteriophage mutations and, 29
bacteriophages and, 23
genetic effects of, 132-33

phage mutual reactivation and, 30
phage photoreactivation and, 27-28
ultraviolet, photoreactivation and, 133
Rheumatic fever, penicillin prophylaxis in, 104
Rhipidium americanum, zoospore release in, 175
Rhizophlyctis rosea, pure cultures of, 174
Rhodospirillum rubrum, metabolism of, intermediary carbohydrate, photosynthesis and, 76-77
Ribonucleic acid
bacteriophage and, resistance to, 132
and protein synthesis, 87-88
Rickettsiae
acridines and, 226-27
antibiotics and, 223-25
aureomycin and, 107, 110, 224-25
chemotherapy and, 223-27
vitamin deficiency in, 227
vitamins, review on, 227
chloramphenicol and, 115
electron microscopy of, 11
infection, experimental, vitamin B deficiency and, 353
nitrocompounds and, 227
Rickettsia microti, streptomycin and, 105
Rickettsia ruminantium, sulfonamides and, 230
Rickettsia tsutsugamushi, chloramphenicol and, 224
Rocky Mountain spotted fever, aureomycin and, 225
Ruminants, see Protozoa, mutualisms with ruminants

S

Salmonella, streptomycin and, 105
Salmonella aertrycke, endotoxin of, succinoxidase in, 71-72
Salmonella typhimurium
protein deficiency and, 346
riboflavin deficiency and, 352
Saprolegniaceae
heterothallism in, 185-87
taxonomy of, experimental, variability and, 194-95
Serratia marcescens, metabolism of, intermediary nitrogen, 84-85
Serum therapy
and Blastomyces dermatitidis, 298
and moniliasis, 294
Sexuality in aquatic phycomycetes, 180-87
see also specific orders, genera and species
Shigella sonnei
metabolism of, streptomycin on, 106
phage adsorption by, 24
streptomycin and, 90-91
Spores, germination of, in aquatic phycomycetes, 177-80
Sporotrichosis, immunology of, 294-95
Staphylococci
lysogenicity in, 28
review on, 28
metabolism of, penicillin on, 92-93
penicillin assimilation of, 94
penicillin resistance in, amino acid metabolism and, 207-8
phage adsorption by, 24-25
see also Micrococcus pyogenes
Staphylococcus aureus
amino acid metabolism in, penicillin resistance and, 93-94
metabolism of, penicillin and, 93
nucleotide degradation in, penicillin and, 93
penicillin and, mode of action of, 101
Starch, metabolism of, in protozoa-ruminant mutualisms, 57-58
Streptococci
enzymes in, streptomycin and, 105
penicillin resistant
enzymatic changes in, 208
hemolytic changes in, 206-7
in vivo development of, 208
sulfonamide resistant, 203
biochemical changes in, 204
Streptococcus faecalis
autolysis in, lysine and, 80-81
histidine synthesis in, 84
Streptococcus hemolyticus, metabolism of, intermediary nitrogen, 85
Streptomyces aureofaciens, and aureomycin, 106
Streptomyces coelicolor, glucose fermentation by, 71
Streptomyces griseus, streptomycin from, induced mutation and, 104-5
Streptomycin, 104-6, 212-16
bacterial dependence upon biochemical changes and, 214-15
morphology and, 214
substitutes in, 215
in vitro development of, 214
in vivo development of, 215
bacterial resistance to, 212-16
biochemical changes in, 213
clinical observations on, 213-14
morphology and, 213
origin of, 215-16
permanence of, 212-13
in vitro development of, 212
in vivo development of, 213
and bacteriophage, 239
and brucellosis, 337
chlorophyll and, 130
clinical effectiveness of, 213-14
and intermediary metabolism, 90-92
lysogenesis and, 28
production of, 104-5
and rickettsial infections, 223-24
therapy, 106
and tularemia, 317, 320
Sulfadiazine, resistance to, psittacosis virus, 164
Sulfanilamide, Neurospora mutant and, 141
Sulfonamides, 201-5
and p-aminobenzoic acid, 83
bacterial resistance to, 201-5
p-aminobenzoic acid and, 204
biochemical changes in, 204
clinical observations on, 202-4
mechanism of, 94
Woods-Fildes theory of, 204
and brucellosis, 337
on intermediary metabolism, 94-95
penicillin use with, 103
and psittacosis-lymphogranuloma group, 229-30
reviews on, 229
and rickettsial infections, 225
and tularemia, 317
Symbiosis, see Mutualisms

T

Taxonomy, experimental, see Phycomycetes, aquatic
Termites, see Protozoa,

mutualisms with termites
Terramycin, 117-18
properties of, 118
Thermophily, mutations and, 131
Thiamine triphosphate in metabolism, 96
Thionine dyes and rickettsial infections, 226
Torula utilis, intermediary nitrogen metabolism of, 85
Torulosis, immunology of, 287-88
Toxins, virus pathogenicity and, 155
Treponema pallidum, flagella of, 9
Trypanosoma lewisi, biotin deficiency and, 351
Tryptophane, intermediary metabolism of, 82-83
Tubercle bacilli
allergic response to, 45
antigens of, 46-48
carbohydrates of, 38-39
reviews on, 38, 39
see also Tubercle bacilli, antigens of
drug resistance in, reviews on, 214
enzymes of, 40
fractionating scheme for, 36
immunology of, 46-48
lipids of, 37-38
see also Tuberculin
nucleic acids and nucleoproteins of, 40-41
pigments of, review on, 39
proteins of, 41-43
see also Allergic response, Antigens and Tuberculin
protein deficiency and, 346
streptomycin resistance in, p-aminosalicylic acid and, 214
vitamins of, 39-40
Tuberculin, 43-45
chemistry of, review on, 43
protein fraction activity as, 41-43
purified protein derivative, 41-42, 43, 44-45
Tuberculina maxima
as fungus antibiotic, 248
plant disease control with, 250-51
Tuberculosis and brucellosis, 335
Tularemia, 313-25
chemotherapy of, experimental, 317-18
clinical observations on, 319-20
distribution of, 321
in American waters, 324-25
epidemiology of, 320
immunity to
active, 315-16
passive, 316
immunology of, 317
inapparent infections, 316
laboratory diagnosis of, 318-19
pathogenesis of, 316
pathology of, 315
pneumonia, primary tularemic, incidence of, 325
sources of infection for, 320
therapy of, clinical, 320
transmission of
arthropod, 322-23
modes of, 321-22
murine epidemics and, 323-24
water-borne epidemics and, 324
vaccine prophylaxis and, 318

V

Vaccine therapy and actinomycosis, 289-90
Variation
allelisms and, tests for, 130
desoxyribonucleic acid and, 130-31
extrachromosomal changes and, 129-30
mechanism of, 129-31
origin of, 129
see also Genetics, Mutations and specific organisms
Vibrio comma, influenza virus inhibition by, 234-35
Vibrios, flagella of, attachment point of, 8
Viruses
alastrim, transformation to vaccinia, 158
animal, mutation rates in, 161-62
and antibiosis, see under Antibiosis
aureomycin and, 108
bacterial, see Bacteriophage
bronchitis, infectious, cross-resistance test for, 270
cellular resistance to, review on, 270
chemotherapy and, 227-41
chicken pox
chemotherapy and, 231
see also Viruses, pox
chloramphenicol and, 114
clinical identification of, 261-77
common cold, cross-resistance test for, 267-68
Coxsackie group
cross-resistance test for, 270
neutralization test for, 263-64
dengue
cross-resistance test for, 268
neutralization test for, 265
electron microscopy of, 11-15
reviews on, 21
encephalitides
complement-fixation test for, 274-75
cross-resistance test for, 270-71
neutralization test for, 261-63
encephalitides, arthropod-borne, 151-53
antigenic relationships of, 152
stem virus in, 152-53
equine encephalitis, vitamin B deficiency and, 354
foot-and-mouth disease
complement-fixation test for, 275-76
cross-neutralization test for, 268-69
neutralization test for, 265
genetic recombination in, 137
genetics of, 151-65
hepatitis, infectious, cross-resistance test for, 268
Herpes simplex, chemotherapy and, 231
Herpes zoster, chemotherapy and, 231
homologous serum jaundice, cross-resistance test for, 268
immunity to, local versus humoral, 270
immunological reactions to, 261-77
infection, experimental, vitamin B deficiency and, 353-54
influenza, 153-58
acridines on, 235
antigenic variations in, 153-54
atropine and, 236
chemotherapy and, 234-37
complement-fixation test for, 275
elution rate variations in, 158
hemagglutination-inhibition test for, 272-73
hemagglutination variation in, 155-58
hexamidine and, 235
inhibition by enzymes, 234-35
inhibition mechanism in, 236
inhibition by mucoproteins, 234

inhibition by polysaccharides, 234
mercurials and, 236
neutralization test for, 266
pathogenicity of, hemagglutination and, 155
pathogenicity, variation in, 155
quinine and, 236
tannic acid and, 235-36
triphenylmethane dyes and, 235
interference phenomena, reviews on, 356
Japanese encephalitis, inapparent infection incidence of, 263
mononucleosis, infectious, hemagglutination-inhibition test for, 272
mumps
chemotherapy and, 232-33
complement fixation test for, 275
hemagglutination-inhibition test for, 272
inhibition by polysaccharides, 232-33
neutralization test for, 265-66
polysaccharide resistance of, 164
myxomatosis, infectious, from rabbit fibroma, 162
neoplasms and, 14-15
neurotropic
anesthesia and, 238
chemotherapy and, 237-39
darvisul and, 238
dietary factors and, reviews on, 239
dyes and, 238
hemagglutination-inhibition test for, 273
Newcastle disease, hemagglutination-inhibition test for, 273
pathogenicity of, toxins and, 155
phlebotomus fever, cross-resistance test for, 268
plant
antiserum on, 13
variant characteristics of, 161
pneumonia virus of mice
inhibition by polysaccharides, 233-34
vitamin deficiency and, 233-34
poliomyelitis
amino acid deficiency and, 345-46
chemotherapy and, 237-38
cross-resistance test for, 269-70
immunologic types in, 160, 269
metabolic rate and, 238
mineral deficiency and, 348-49
neutralization test for, 264-65
pox
chemotherapy and, 231-32
cross-resistance test for, 269
hemagglutination-inhibition test for, 273-74
interrelationships of, 158-59
see also specific viruses
psittacosis
cross-resistance test for, 270
immunologic relationships of, 160
neutralization test for, 266
sulfadiazine resistance of, 164
psittacosis-lymphogranuloma group
acridines and, 230
antibiotics and, 227-30
chemotherapy and, 227-30
complement-fixation test for, 276
nitrocompounds and, 230
rabbit fibroma transformation to infectious myxomatosis, 162
rabies
egg culture of, 159
strain variations of, 159
reviews on, 160
Russian Far East encephalitis, brain extracts and, 238
studies of, limitations in, 164-65
tobacco mosaic, mutation rates in, 161
vaccinia
cowpox differentiation from, 158
immunologic relationships within, 158-59
and infectious ectromelia virus, 269
from variola and alastrim, 158
see also Viruses, pox
variation in, 151
arthropod transmission and, 163-64
drug resistance and, 164
environmental selection and, 161
host genetics and, 163
inoculum size and, 163
isolation and, 153, 154
mechanisms of, 161-64
O ›D phase, 156
reviews on, 151
selective factors and, 163-64
see also specific viruses
variola
transformation to vaccinia, 158
see also Viruses, pox
vesicular stomatitis, vitamin B deficiency and, 354
yellow fever
modification of, 160
strain variations of, 159-60
Vitamin A, and infection, experimental, 350
Vitamin B, and infection, experimental, 350-54
Vitamin K and brucellosis, 337
Vitamins
deficiency of
pneumonia virus of mice and, 233-34
rickettsial infections and, 227
and infection, experimental, reviews on, 349
in tubercle bacilli, 39-40

Y

Yeast
desoxyribonuclease in, 90
desoxyribonucleic acid in, composition of, 90
Harden-Young effect, 67
hexokinase, homologous antiserum on, 71
penicillin assimilation of, 94
phosphorylation in, 68
protein synthesis in, ribonucleic acid and, 87-88

Z

Zootermopsis, nitrogen assimilation, 55